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1980 INTERNATIONAL ENERGY ANNUAL

September 1981

U.S. Department of Energy
Energy Information Administration
Washington, D.C. 20461

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III

The *International Energy Annual, 1980* was prepared under the supervision of Louis DeMouy, Chief, International Statistics Division, Energy Information Administration, U.S. Department of Energy. As of July 1, 1981, this Division was reorganized under the Short-Term Information Division, International Energy Branch.

Project Director was Bernadette Michalski.

Principal contributors were Wayne Dameron, Patricia Lott, and Patricia Baade.

The *International Energy Annual* presents current data and trends for production, consumption, stocks, imports, and exports for primary energy commodities in more than 160 countries, dependencies and areas of special sovereignty. Also included are prices on crude petroleum and petroleum products in selected countries. This report is published to keep the public and other interest parties fully informed with respect to primary energy supplies on a global basis. The data presented have been largely derived from national sources and have been converted to units of measurement and thermal values familiar to the American public.

Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95-91/Section 205(a) that states:

> "The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information. . ."

Released for printing September 21, 1981.

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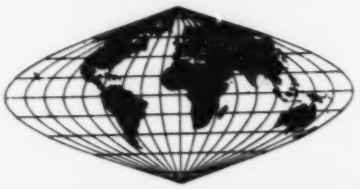
OVERVIEW



Total Primary Energy Production

The principal sources of the world's primary energy are liquid fuels (crude oil and natural gas liquids), natural gas, coal, and electricity from hydropower and nuclear power. Measured in British thermal units (Btu), world production of primary energy rose from 246 quadrillion (10^{15}) Btu in 1973 to 287 quadrillion Btu in 1980, an increase of about 16 percent over the 1973-1980 period. The annual growth rate averaged 2.2 percent. Between 1973 and 1980, energy production declined only two times. In 1975, cutbacks in crude oil production in some member nations of the Organization of Petroleum Exporting Countries (OPEC) and declining crude oil production in the United States contributed to a 1.2 percent reduction in total world primary energy produced. In 1980, declines in crude oil production in some countries (particularly Iran, Iraq, and Kuwait) resulted in a 1.3 percent reduction.

Although overall production declined in 1980, there were significant regional increases over the 7-year period. Important production increases occurred in Western Europe, in the Far East and Oceania, and in Eastern Europe and the U.S.S.R. Their respective annual growth rates were 5.3, 5.2, and 4.1 percent. Energy produced in North America and in Africa increased slightly as well.

During 1980, the world's largest energy producers were, in order, the United States, the U.S.S.R., Saudi Arabia, China, and Canada. As a group, these five countries accounted for 59.0 percent of the world's production. The U.S.S.R. showed the largest increase in production (3.7 percent) over the previous year. Saudi Arabia and the United States showed increases of 3.6 and 1.5 percent, respectively, while Chinese production declined 1.7 percent and Canadian production declined 1.5 percent.

Other countries with smaller levels of energy production, but notable increases during the 1973-1980 period, were Mexico, the United Kingdom, and Norway. Countries experiencing sizable declines in energy production over the period included Iran, Kuwait, and Venezuela.

Measured by type of primary energy production, crude oil and natural gas liquids accounted for 46 percent of the world's primary energy production in 1980, natural gas for 18 percent, coal for 27 percent, hydroelectric power for 6 percent, and nuclear power for 3 percent.

Crude Oil and Natural Gas Liquids Production

World production of crude oil and natural gas liquids rose from 58.5 million barrels per day in 1973 to 63.1 million barrels per day in 1980, for an annual growth rate of 1.1 percent. In terms of heat content, production rose from 122.2 quadrillion Btu to 131.0 quadrillion Btu, for an annual growth rate of 1.0 percent during the 7-year period. Crude oil and natural gas liquids accounted for 50 percent of the world's primary energy production in 1973 and for 46 percent in 1980.

During the period from 1973 to 1980, world crude oil production increased by 3.7 million barrels per day. On a regional basis, however, crude oil production changes did not occur uniformly. A significant increase was observed in Western Europe, which showed an average annual growth rate of 27.3 percent. More moderate increases were observed in the Far East and Oceania and in Eastern Europe and the U.S.S.R. Their respective annual growth rates for the 1973-1980 period were 5.7 and 4.6 percent. The most important regional decrease occurred in the Middle East, where production declined an average of 1.9 percent a year, for a total of 12.6 percent over the 7-year period.

Between 1979 and 1980, the most significant national changes occurred in Iran, Iraq, and Kuwait, where production for the three countries together dropped 36.2 percent. In fact, Saudi Arabia was the only country in the Middle East to increase crude oil production over the previous year.

During 1980, the world's largest crude oil producers were, in order, the U.S.S.R., Saudi Arabia, the United States, Iraq, and Venezuela. As a group, these five countries accounted for 59 percent of the world's crude oil production.

Countries with smaller levels of crude oil production, but notable increases over the 7-year period, included the United Kingdom, Mexico, China, and Norway.

World production of natural gas liquids gradually increased over the 1973-1980 period, rising from 2.8 million barrels per day in 1973 to a level of 3.6 million barrels per day in 1980. All regions showed growth in production, with the exceptions of North America and Central and South Amer-

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ica, which exhibited minor declines. Saudi Arabia made the largest national increase (about 280 thousand barrels per day).

The world's largest crude oil and natural gas liquids producers were, in order, the U.S.S.R., Saudi Arabia, the United States, Iraq, and Venezuela. As a group, these five countries accounted for 59 percent of the world's production of crude oil and natural gas liquids.

Natural Gas Production

World dry natural gas production rose from 43.2 trillion cubic feet in 1973 to 52.8 trillion cubic feet in 1980, for a growth rate of 2.9 percent per year. In terms of heat content, natural gas production rose from 43.3 quadrillion Btu in 1973 to 52.4 quadrillion Btu in 1980, for a growth rate of 2.7 percent. Dry natural gas accounted for 17 percent of total world primary energy production in Btu in 1973 and for 18 percent in 1980.

On a regional basis, there were major increases of dry natural gas production (Btu basis) in Eastern Europe and the U.S.S.R. and in the Far East and Oceania from 1973 to 1980. One country—the U.S.S.R.—accounted for 80.0 percent of the 7-year increase for the two regions. Production in Btu in the Far East and Oceania increased by a rate of 12.0 percent per year over the 1973-1980 period; the rate of increase in Eastern Europe and the U.S.S.R. was 8.0 percent.

In other regions there was modest growth except for the Middle East, where production returned to 1973 levels, and North America, which experienced a decline of 6.1 percent between 1973 and 1980. This decline was caused by lower production levels in the United States. In 1973, United States' production was 22.2 quadrillion Btu. By 1980, production had declined to 19.8 quadrillion Btu.

The bulk of the world's production of natural gas occurred in North America and in Eastern Europe and the U.S.S.R. In 1980, about 76 percent of the world's supply of natural gas was produced in these regions.

Production of natural gas in 1973 and 1980 was dominated by two countries, the United States and the U.S.S.R. Their Btu production in 1973 was 69 percent of the world total, and 65 percent in 1980. Other significant producers, in order, were the Netherlands, Canada, Mexico, and the United Kingdom. These four countries provided 15 percent of the world total.

Coal Production

World coal production rose from 3.4 billion short tons in 1973 to 4.2 billion short tons in 1980, for a growth rate of 2.8 percent per year. In terms of heat content, coal production rose from 65.0 quadrillion Btu in 1973 to 77.8 quadrillion Btu in 1980, a growth rate of 2.6 percent. Coal accounted for 26 percent of the world's primary energy production in Btu in 1973 and for 27 percent in 1980.

During the 1973-1980 period, growth in coal production, in terms of heat content, increased in all regions. Production in the African region increased by 78 percent between 1973 and 1980, principally as a result of expansion and development activities in South Africa. The Far East and Oceania region achieved a 30-percent increase in output between 1973 and 1980, with China, Australia, and India accounting for most of the production increases. Production in the Western Hemisphere increased by 32 percent between 1973-1980 in spite of the slight drop in production reported by the United States in 1978. Production in Eastern Europe and the U.S.S.R. increased by 7 percent. Most of the increase was attributed to increased production from Poland, the U.S.S.R., and Czechoslovakia.

Combined, the United States, China, and the U.S.S.R. accounted for 60 percent of total world coal output by heat value in 1980. Another significant producer was Poland, at 7 percent of the world coal output by heat content, followed by West Germany and the United Kingdom at 4 percent.

Hydroelectric Power Production

World hydroelectric power production rose from 1.3 trillion kilowatt hours in 1973 to 1.7 trillion kilowatt hours in 1980, an average annual growth rate of 4.3 percent. Measured on a fossil fuel equivalent basis, production increased from 13.5 quadrillion Btu to 18.1 quadrillion Btu, an annual growth rate of 4.3 percent. Hydroelectric power accounted for 6 percent of the world's primary energy production in 1973 and for 6 percent in 1980.

Every world region reflected growth in hydroelectric power production during the 1973-1980 period. However, no region was able to add as much as 1 quadrillion Btu or 100 billion kilowatt hours to production over these years. On a Btu basis, the major producers in 1980 were, in order, the United States, Canada, the U.S.S.R., Brazil, and Japan. These countries accounted for 53 percent of the total hydroelectric power production.

Nuclear Electric Power Production

World nuclear electric power production rose substantially between 1973 and 1980, rising from 0.2 trillion kilowatt hours in 1973 to 0.7 trillion kilowatt hours in 1980, an annual growth rate of 19.7 percent. Measured on a fossil fuel equivalent basis, production increased from 2.2 quadrillion Btu to 7.4 quadrillion Btu, for an annual growth rate of 19.1 percent. Nuclear electric power accounted for 1 percent of the world's primary energy production in 1973 and for 3 percent in 1980.

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At the end of 1980, a total of 22 countries produced electricity commercially from nuclear power, compared to 13 countries at the end of 1973. These countries had approximately 245 reactor units in December 1980, including 74 in the United States.

On a regional basis, 43 percent of the total world nuclear electric power in Btu was produced in North, Central, and South America during 1980, compared with 51 percent in 1973. Every region showed strong annual growth rates over the 1973-1980 period: North, Central, and South America, 16.2 percent; Western Europe, 16.1 percent; Eastern Europe and the U.S.S.R., 33.3 percent; and the Far East and Oceania, 33.3 percent.

The largest national producers, in order, were the United States, Japan, the U.S.S.R., France, and the United Kingdom. These countries produced 73 percent of the 1980 total nuclear production in Btu.

Petroleum Consumption, Trade, and Stocks

World consumption of petroleum in 1979 was estimated to be 65.1 million barrels per day. North America accounted for 33 percent of the total, followed by Western Europe at 23 percent. The Middle East and Africa accounted for only 5 percent of the world's oil consumption, but produced 44 percent of the world's crude oil and natural gas liquids during 1979.

Total output of refined products in 1979 was estimated to be 64.0 million barrels per day. In North America, production of motor gasoline accounted for 42.9 percent of total refinery output. Motor gasoline production did not exceed 20 percent in any other region of the world.

World imports of crude oil and refined products in 1979 were highest in Western Europe, which received 38.1 percent of crude oil imports and 42.3 percent of refined products. The United States was the largest single national importer, accounting for 6.5 million barrels per day of crude oil and 1.9 million barrels per day of refined products.

World exports of crude oil in 1979 were predominantly from the Middle East and Africa, amounting to over 25 million barrels per day, roughly 75 percent of the world's crude oil exports.

At the end of 1980, petroleum stocks for the Organization of Economic Cooperation and Development (OECD) countries were higher than at any previous time during the 1977-1980 period, with the exception of the third quarter in 1980. Between the fourth quarter of 1977 and the fourth quarter of 1980, OECD countries' stocks increased 12.7 percent. Countries showing the largest increases in petroleum stocks were West Germany (36.9 percent), Japan (20.6 percent), and the United Kingdom (15.0 percent). The United States increased its stocks by 6.3 percent.

Natural Gas Consumption and Trade

World consumption of natural gas in 1979 was estimated to be 51.7 trillion cubic feet. The United States accounted for 39 percent of the total, followed by the U.S.S.R. at 25 percent. No other single country exceeded 4 percent of the world total.

World imports of natural gas in 1979 were highest in Western Europe—55 percent of natural gas imports. West Germany, the largest single national importer, accounted for over a third of all natural gas imports to that region. The United States was the next largest single importer, accounting for 1.3 trillion cubic feet of natural gas, or 19 percent of the world total.

World exports of natural gas in 1979 came predominantly from Western Europe and from Eastern Europe and the U.S.S.R., which together accounted for over 4 trillion cubic feet, roughly 62 percent of the world's total gas exports. Canada sold 1 trillion cubic feet of natural gas, making it the third largest exporting country in the world. Essentially all of Canada's exported natural gas was purchased by the United States.

Coal Consumption and Trade

World consumption of coal in 1979 was approximately 3.0 billion tons of coal equivalent. The United States accounted for 19.9 percent of the total, followed by China at 19.8 percent and the U.S.S.R. at 17.2 percent. Other major consumers included Poland, West Germany, and the United Kingdom.

Western Europe imported 43.4 percent of total world imports, with France accounting for nearly a third of this amount. Japan, the largest single national importer, purchased 60.2 million tons of coal equivalent—21.6 percent of the world total and almost twice as much as France.

World exports of coal in 1979 came predominantly from the United States, Poland, and Australia, which together exported over 164.0 million tons of coal equivalent, 59.0 percent of the world's coal exports.

Petroleum Prices

Since 1973, official selling prices for international crude oils have risen substantially. The most significant annual January 1 price increases occurred in 1974 and 1980. In 1974, Saudi Arabia Light (34 degrees API) registered a more than four-fold increase, to $10.84 per barrel. In 1980, Saudi Light almost doubled its previous year's price and sold for $26.00 per barrel. As of January 1, 1981, Saudi Light, at $32.00 per barrel, remained among the lower-priced crude oils. African crude oils, Norway's Ekofisk, and Ecuador's Oriente sold for $40.00 per barrel and up.

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Official selling prices are stated in dollars per barrel. Consequently, the actual cost to a country for sales at these prices varies according to year-to-year changes in exchange rates between various national currencies and U.S. dollars.

At the end of January 1981, representative per-gallon premium motor gasoline prices were $2.99 in France; $3.38 in Italy; $2.93 in Japan; $2.43 in West Germany; $2.52 in the United Kingdom; $1.34 in the United States; and $1.06 in Canada.

Reserves

World crude oil reserves were estimated to be 649 billion barrels as of January 1, 1981. More than half (56 percent) were found in the Middle East. The countries with largest reserve totals, in order, were Saudi Arabia, Kuwait, the U.S.S.R., Iran, and Mexico. These five countries accounted for 62 percent of the world's crude oil reserves.

World natural gas reserves were estimated to be 2.6 quadrillion cubic feet as of January 1, 1981. Eastern Europe, the U.S.S.R., and the Middle East accounted for about 64 percent of this total. Countries with the largest reserve totals, in order, were the U.S.S.R., Iran, the United States, Algeria, and Saudi Arabia. These five countries accounted for 70 percent of the world's natural gas reserves.

In a 1979 survey by the World Energy Conference, world recoverable coal reserves were estimated to be 975 billion short tons, which is 40 percent higher than in a previous survey in 1977. Countries with the largest estimated coal reserves, in order, were the U.S.S.R., the United States, China, Australia, and West Germany. These five countries accounted for 76 percent of the world's estimated recoverable reserves of coal.

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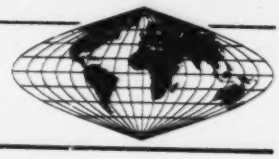
World Primary Energy Production
in British Thermal Units

Table 1. WORLD PRIMARY ENERGY PRODUCTION, 1973-1980

(Quadrillion [10^{15}] Btu)



REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	9.50	9.38	8.89	8.73	9.16	9.26	9.94	9.79
MEXICO	1.85	2.13	2.43	2.76	3.16	4.19	4.56	6.29
UNITED STATES	62.39	61.18	59.99	60.01	60.21	61.14	63.82	64.76
TOTAL	73.74	72.70	71.31	71.50	72.53	74.58	78.32	80.84
CENTRAL AND SOUTH AMERICA								
ARGENTINA	1.20	1.24	1.23	1.24	1.31	1.40	1.49	1.54
BRAZIL	1.03	1.15	1.24	1.32	1.43	1.53	1.61	1.68
VENEZUELA	8.20	7.36	5.93	5.88	5.85	5.65	6.10	5.67
OTHER	2.24	2.22	2.23	2.35	2.42	2.70	2.93	3.01
TOTAL	12.67	11.97	10.63	10.79	11.02	11.28	12.13	11.91
WESTERN EUROPE								
FRANCE	1.76	1.82	1.88	1.72	2.02	2.07	2.07	2.33
GERMANY, WEST	4.93	4.94	4.87	4.87	4.79	4.76	4.98	4.93
ITALY	1.06	1.07	1.08	1.11	1.15	1.13	1.12	1.06
NETHERLANDS	2.51	2.95	3.16	3.38	3.37	3.10	3.35	2.95
NORWAY	0.83	0.88	1.22	1.50	1.49	2.10	2.71	3.09
SPAIN	0.69	0.73	0.74	0.72	0.89	0.95	0.99	1.02
UNITED KINGDOM	4.66	4.47	4.97	5.49	6.69	7.31	8.41	8.55
YUGOSLAVIA	0.75	0.82	0.84	0.88	0.95	0.97	1.02	1.06
OTHER	2.39	2.40	2.61	2.49	2.84	2.90	3.10	3.11
TOTAL	19.58	20.07	21.37	22.16	24.20	25.28	27.73	28.12
EASTERN EUROPE AND U.S.S.R.								
CZECHOSLOVAKIA	1.73	1.77	1.82	1.86	1.90	1.94	1.96	1.91
GERMANY, EAST	2.19	2.19	2.20	2.26	2.30	2.32	2.38	2.40
POLAND	4.94	5.09	5.37	5.59	5.81	6.02	6.20	5.94
ROMANIA	2.17	2.22	2.33	2.42	2.52	2.37	2.54	2.39
U.S.S.R.	39.28	41.75	43.62	46.15	48.42	50.68	52.50	54.45
OTHER	1.16	1.14	1.20	1.25	1.30	1.33	1.32	1.27
TOTAL	51.46	54.17	56.54	59.55	62.26	64.67	66.91	68.36
MIDDLE EAST								
IRAN	13.39	13.86	12.39	13.60	13.13	12.50	7.43	3.97
IRAQ	4.35	4.25	4.89	5.24	5.08	5.44	7.37	5.32
KUWAIT	6.84	5.76	4.79	4.93	4.55	4.95	5.82	4.09
SAUDI ARABIA	16.63	18.68	15.68	18.95	20.57	18.48	21.22	22.09
UNITED ARAB EMIRATES	3.28	3.56	3.57	4.20	4.45	4.09	3.99	3.79
OTHER	2.34	2.49	2.47	2.54	2.40	2.39	2.46	2.26
TOTAL	46.83	48.60	43.78	49.45	50.18	47.86	48.29	41.51
AFRICA								
ALGERIA	2.47	2.35	2.34	2.70	2.76	3.05	3.13	2.86
EGYPT	0.41	0.39	0.58	0.82	1.04	1.21	1.30	1.45
LIBYA	4.72	3.32	3.27	4.26	4.53	4.36	4.59	3.98
NIGERIA	4.45	4.89	3.88	4.52	4.50	4.06	4.92	4.41
SOUTH AFRICA	1.48	1.57	1.65	1.84	2.03	2.15	2.46	2.72
OTHER	1.34	1.46	1.53	1.39	1.63	1.54	1.76	1.80
TOTAL	14.89	13.98	13.25	15.53	16.49	16.37	18.16	17.22
FAR EAST AND OCEANIA								
AUSTRALIA	2.95	3.12	3.30	3.61	3.71	3.82	4.23	4.19
CHINA	14.22	15.39	16.30	17.16	18.18	20.37	20.92	20.57
INDIA	2.22	2.36	2.68	2.84	2.64	3.02	3.13	2.84
INDONESIA	2.90	2.99	2.90	3.38	3.85	3.77	3.84	3.82
JAPAN	1.53	1.70	1.65	1.87	1.65	1.89	2.07	2.30
KOREA, NORTH	1.15	1.22	1.27	1.30	1.31	1.33	1.41	1.41
OTHER	2.13	2.15	2.34	2.66	2.86	3.03	3.42	3.56
TOTAL	27.12	28.93	30.45	32.83	34.19	37.24	39.03	38.69
WORLD TOTAL	246.28	250.41	247.33	261.79	270.87	277.29	290.57	286.65

[a]Preliminary.

Note: Sum of components may not equal total due to independent rounding.

Note: Includes crude oil, lease condensate, natural gas plant liquids, dry natural gas, coal, net hydroelectric power, and net nuclear power.

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Table 2. WORLD CRUDE OIL PRODUCTION, 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	3.82	3.57	3.05	2.75	2.80	2.78	3.17	3.03
MEXICO	1.02	1.25	1.55	1.83	2.15	2.65	3.20	4.26
UNITED STATES	19.49	18.58	17.73	17.26	17.45	18.43	18.10	18.25
TOTAL	**24.33**	**23.40**	**22.33**	**21.84**	**22.41**	**23.87**	**24.48**	**25.54**
CENTRAL AND SOUTH AMERICA								
ARGENTINA	0.92	0.91	0.87	0.87	0.94	0.99	1.04	1.08
BRAZIL	0.36	0.37	0.37	0.35	0.34	0.34	0.35	0.38
COLOMBIA	0.40	0.37	0.35	0.32	0.30	0.29	0.27	0.28
ECUADOR	0.46	0.38	0.35	0.41	0.40	0.43	0.46	0.44
PERU	0.16	0.17	0.15	0.16	0.22	0.32	0.42	0.42
TRINIDAD AND TOBAGO	0.36	0.41	0.45	0.49	0.51	0.51	0.47	0.47
VENEZUELA	7.47	6.60	5.21	5.10	5.00	4.80	5.23	4.82
OTHER	0.18	0.19	0.22	0.21	0.20	0.28	0.29	0.31
TOTAL	**10.30**	**9.39**	**7.95**	**7.93**	**7.91**	**7.97**	**8.53**	**8.19**
WESTERN EUROPE								
NORWAY	0.07	0.07	0.40	0.59	0.59	0.75	0.85	1.12
UNITED KINGDOM	(*)	(*)	0.03	0.53	1.65	2.32	3.36	3.49
OTHER	0.91	0.90	0.86	0.85	0.80	0.81	0.83	0.82
TOTAL	**0.98**	**0.98**	**1.29**	**1.97**	**3.05**	**3.89**	**5.05**	**5.43**
EASTERN EUROPE AND U.S.S.R.								
ROMANIA	0.62	0.63	0.64	0.64	0.64	0.60	0.54	0.50
U.S.S.R.	16.80	17.85	19.09	20.16	21.18	22.18	22.72	23.40
OTHER	0.21	0.22	0.22	0.22	0.22	0.23	0.22	0.22
TOTAL	**17.64**	**18.70**	**19.94**	**21.02**	**22.04**	**23.00**	**23.48**	**24.12**
MIDDLE EAST								
IRAN	12.60	12.94	11.50	12.68	12.17	11.27	6.81	3.58
IRAQ	4.30	4.20	4.82	5.16	5.00	5.37	7.28	5.28
KUWAIT	6.55	5.49	4.52	4.64	4.25	4.60	5.40	3.59
QATAR	1.19	1.08	0.93	1.04	0.93	1.01	1.06	0.98
SAUDI ARABIA	16.32	18.24	15.22	18.35	19.88	17.71	20.33	21.18
SYRIA	0.23	0.28	0.38	0.39	0.42	0.38	0.37	0.36
UNITED ARAB EMIRATES	3.24	3.52	3.48	4.14	4.22	3.87	3.87	3.62
OTHER	0.78	0.98	1.03	0.92	0.86	0.81	0.81	0.71
TOTAL	**45.22**	**46.73**	**41.87**	**47.31**	**47.73**	**45.00**	**45.92**	**39.30**
AFRICA								
ALGERIA	2.24	2.06	2.02	2.22	2.35	2.37	2.35	2.07
ANGOLA	0.35	0.36	0.35	0.23	0.41	0.28	0.31	0.32
EGYPT	0.36	0.32	0.51	0.72	0.90	1.05	1.13	1.29
GABON	0.33	0.44	0.49	0.48	0.48	0.45	0.44	0.38
LIBYA	4.55	3.18	3.10	4.06	4.32	4.12	4.34	3.72
NIGERIA	4.41	4.85	3.83	4.45	4.44	4.01	4.86	4.35
OTHER	0.26	0.24	0.28	0.24	0.27	0.30	0.41	0.50
TOTAL	**12.49**	**11.45**	**10.58**	**12.40**	**13.17**	**12.57**	**13.86**	**12.63**
FAR EAST AND OCEANIA								
AUSTRALIA	0.78	0.82	0.87	0.91	0.91	0.92	0.94	0.81
BRUNEI	0.45	0.40	0.37	0.42	0.44	0.43	0.49	0.49
CHINA	2.34	2.82	3.20	3.59	4.02	4.47	4.55	4.55
INDIA	0.31	0.33	0.35	0.37	0.16	0.47	0.51	0.38
INDONESIA	2.85	2.93	2.79	3.21	3.59	3.48	3.33	3.31
MALAYSIA	0.19	0.17	0.20	0.34	0.38	0.45	0.59	0.59
OTHER	0.12	0.12	0.12	0.13	0.17	0.17	0.23	0.21
TOTAL	**7.04**	**7.59**	**7.89**	**8.96**	**9.67**	**10.39**	**10.64**	**10.33**
WORLD TOTAL	**117.99**	**118.24**	**111.85**	**121.45**	**125.97**	**126.69**	**131.95**	**125.55**

[a]Preliminary.
*Denotes less than one-half the unit of measure.
Note: Includes lease condensate.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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Table 3. WORLD NATURAL GAS PLANT LIQUIDS PRODUCTION, 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	0.51	0.49	0.49	0.45	0.46	0.42	0.46	0.46
MEXICO	0.12	0.13	0.13	0.15	0.17	0.18	0.24	0.29
UNITED STATES	2.57	2.47	2.37	2.33	2.33	2.25	2.29	2.26
TOTAL	**3.20**	**3.09**	**2.99**	**2.93**	**2.95**	**2.85**	**2.98**	**3.02**
CENTRAL AND SOUTH AMERICA								
ARGENTINA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
BOLIVIA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
BRAZIL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHILE	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
COLOMBIA	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
VENEZUELA	0.14	0.13	0.12	0.12	0.13	0.13	0.13	0.13
OTHER	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
TOTAL	**0.21**	**0.21**	**0.19**	**0.19**	**0.20**	**0.20**	**0.20**	**0.19**
WESTERN EUROPE								
FRANCE	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
NETHERLANDS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NORWAY	0.00	0.00	0.01	0.03	0.03	0.06	0.06	0.06
SPAIN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
UNITED KINGDOM	0.01	0.01	0.02	0.02	0.05	0.06	0.07	0.07
OTHER	(*)	0.02	(*)	(*)	(*)	(*)	(*)	(*)
TOTAL	**0.07**	**0.08**	**0.10**	**0.13**	**0.15**	**0.19**	**0.20**	**0.20**
EASTERN EUROPE AND U.S.S.R.								
HUNGARY	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03
ROMANIA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
U.S.S.R.	0.23	0.37	0.40	0.47	0.49	0.52	0.53	0.55
OTHER	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
TOTAL	**0.26**	**0.40**	**0.43**	**0.50**	**0.53**	**0.56**	**0.58**	**0.59**
MIDDLE EAST								
IRAN	0.06	0.07	0.07	0.07	0.06	0.07	0.02	0.01
IRAQ	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02
KUWAIT	0.10	0.08	0.08	0.08	0.09	0.12	0.20	0.20
QATAR	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02
SAUDI ARABIA	0.14	0.21	0.22	0.29	0.34	0.40	0.48	0.59
UNITED ARAB EMIRATES	(*)	(*)	(*)	(*)	0.02	0.05	0.05	0.05
TOTAL	**0.30**	**0.37**	**0.39**	**0.46**	**0.53**	**0.65**	**0.77**	**0.88**
AFRICA								
ALGERIA	0.05	0.08	0.10	0.10	0.10	0.16	0.22	0.24
EGYPT	(*)	(*)	(*)	0.01	0.02	0.03	0.03	0.03
LIBYA	0.06	0.03	0.05	0.06	0.06	0.06	0.06	0.06
TOTAL	**0.10**	**0.11**	**0.14**	**0.17**	**0.19**	**0.25**	**0.31**	**0.33**
FAR EAST AND OCEANIA								
AUSTRALIA	0.08	0.08	0.08	0.08	0.09	0.10	0.10	0.10
BRUNEI	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.06
INDONESIA	0.00	0.00	0.00	0.02	0.02	0.05	0.06	0.06
OTHER	(*)	(*)	(*)	0.01	0.01	0.01	0.01	0.01
TOTAL	**0.10**	**0.11**	**0.12**	**0.14**	**0.16**	**0.20**	**0.23**	**0.22**
WORLD TOTAL	**4.25**	**4.37**	**4.36**	**4.53**	**4.70**	**4.90**	**5.28**	**5.43**

[a]Preliminary.
[b]Does not include China for which data is not available.
*Denotes less than one-half the unit of measure.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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Table 4. WORLD NATURAL GAS PRODUCTION (DRY), 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	2.44	2.42	2.44	2.46	2.59	2.47	2.66	2.46
MEXICO	0.46	0.48	0.50	0.49	0.51	0.99	0.73	1.35
UNITED STATES	22.19	21.21	19.64	19.48	19.57	19.49	20.08	19.75
TOTAL	25.09	24.10	22.58	22.43	22.66	22.95	23.46	23.57
CENTRAL AND SOUTH AMERICA								
ARGENTINA	0.22	0.24	0.25	0.25	0.26	0.26	0.29	0.32
BOLIVIA	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07
CHILE	0.04	0.04	0.04	0.04	0.05	0.08	0.05	0.05
COLOMBIA	0.07	0.07	0.07	0.07	0.08	0.08	0.11	0.15
TRINIDAD AND TOBAGO	0.07	0.06	0.06	0.06	0.08	0.09	0.17	0.20
VENEZUELA	0.52	0.54	0.51	0.55	0.60	0.59	0.61	0.59
OTHER	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.08
TOTAL	1.01	1.05	1.03	1.08	1.18	1.23	1.34	1.45
WESTERN EUROPE								
FRANCE	0.28	0.28	0.27	0.26	0.28	0.28	0.28	0.24
GERMANY, WEST	0.67	0.69	0.64	0.64	0.64	0.68	0.70	0.62
ITALY	0.56	0.56	0.53	0.57	0.50	0.50	0.49	0.44
NETHERLANDS	2.38	2.81	3.05	3.27	3.26	2.98	3.24	2.84
NORWAY	0.00	(*)	0.01	0.01	0.11	0.44	0.87	1.03
UNITED KINGDOM	1.06	1.29	1.34	1.40	1.47	1.40	1.45	1.35
OTHER	0.14	0.15	0.16	0.16	0.17	0.17	0.16	0.15
TOTAL	5.09	5.77	5.99	6.31	6.43	6.46	7.19	6.86
EASTERN EUROPE AND U.S.S.R.								
GERMANY, EAST	0.10	0.11	0.10	0.12	0.12	0.12	0.12	0.12
HUNGARY	0.19	0.20	0.20	0.24	0.26	0.29	0.26	0.24
POLAND	0.22	0.21	0.22	0.24	0.26	0.29	0.26	0.23
ROMANIA	1.07	1.11	1.20	1.31	1.39	1.23	1.42	1.32
U.S.S.R.	7.84	8.65	9.52	10.56	11.38	12.25	13.38	14.32
OTHER	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
TOTAL	9.46	10.31	11.28	12.51	13.45	14.22	15.48	16.26
MIDDLE EAST								
BAHRAIN	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.09
IRAN	0.67	0.78	0.76	0.78	0.83	1.10	0.54	0.31
KUWAIT	0.19	0.20	0.19	0.21	0.22	0.24	0.22	0.30
SAUDI ARABIA	0.17	0.23	0.23	0.31	0.35	0.38	0.41	0.32
UNITED ARAB EMIRATES	0.04	0.04	0.08	0.06	0.20	0.18	0.08	0.12
OTHER	0.11	0.10	0.09	0.14	0.13	0.12	0.14	0.08
TOTAL	1.24	1.42	1.43	1.58	1.81	2.10	1.49	1.23
AFRICA								
ALGERIA	0.18	0.21	0.22	0.37	0.30	0.52	0.55	0.55
LIBYA	0.11	0.10	0.12	0.14	0.14	0.17	0.18	0.20
OTHER	0.05	0.05	0.04	0.06	0.08	0.09	0.08	0.08
TOTAL	0.34	0.37	0.39	0.57	0.53	0.78	0.82	0.82
FAR EAST AND OCEANIA								
AUSTRALIA	0.15	0.17	0.19	0.22	0.25	0.27	0.31	0.36
BRUNEI	0.07	0.16	0.21	0.28	0.32	0.33	0.36	0.39
CHINA	0.26	0.30	0.34	0.38	0.46	0.51	0.54	0.53
INDONESIA	0.03	0.04	0.08	0.13	0.21	0.21	0.41	0.41
JAPAN	0.10	0.10	0.09	0.09	0.11	0.10	0.10	0.09
PAKISTAN	0.13	0.15	0.16	0.16	0.17	0.18	0.19	0.28
OTHER	0.33	0.25	0.26	0.30	0.33	0.36	0.33	0.31
TOTAL	1.07	1.17	1.34	1.56	1.85	1.96	2.25	2.37
WORLD TOTAL	43.31	44.19	44.05	46.04	47.92	49.71	52.03	52.36

[a]Preliminary.

*Denotes less than one-half the unit of measure.

Note: Sum of components may not equal total due to independent rounding.

Note: Temperature and pressure at measurement are not reported.

Sources: Refer to Appendix A.

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Table 5. WORLD COAL PRODUCTION, 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	0.52	0.54	0.65	0.65	0.72	0.78	0.70	0.77
MEXICO	0.08	0.10	0.10	0.11	0.13	0.13	0.15	0.14
UNITED STATES	14.37	14.47	15.19	15.85	15.83	15.04	17.65	18.88
TOTAL	**14.97**	**15.11**	**15.94**	**16.61**	**16.68**	**15.96**	**18.50**	**19.79**
CENTRAL AND SOUTH AMERICA								
BRAZIL	0.04	0.07	0.06	0.08	0.08	0.08	0.11	0.11
COLOMBIA	0.09	0.09	0.10	0.10	0.10	0.10	0.14	0.14
OTHER	0.05	0.06	0.05	0.05	0.05	0.04	0.05	0.03
TOTAL	**0.19**	**0.21**	**0.21**	**0.23**	**0.23**	**0.22**	**0.30**	**0.27**
WESTERN EUROPE								
BELGIUM	0.22	0.21	0.19	0.18	0.18	0.17	0.16	0.16
FRANCE	0.76	0.68	0.68	0.67	0.65	0.63	0.56	0.61
GERMANY, WEST	3.69	3.69	3.59	3.60	3.37	3.35	3.48	3.48
GREECE	0.07	0.07	0.09	0.12	0.12	0.12	0.12	0.13
SPAIN	0.28	0.25	0.30	0.31	0.36	0.39	0.42	0.46
TURKEY	0.19	0.18	0.18	0.16	0.20	0.20	0.32	0.30
UNITED KINGDOM	3.19	2.70	3.15	3.04	3.00	3.02	2.99	3.13
YUGOSLAVIA	0.38	0.40	0.42	0.44	0.46	0.47	0.49	0.53
OTHER	0.13	0.11	0.09	0.09	0.08	0.08	0.07	0.07
TOTAL	**8.92**	**8.28**	**8.69**	**8.60**	**8.43**	**8.43**	**8.62**	**8.88**
EASTERN EUROPE AND U.S.S.R.								
BULGARIA	0.38	0.34	0.39	0.36	0.35	0.35	0.39	0.36
CZECHOSLOVAKIA	1.67	1.69	1.74	1.78	1.82	1.85	1.86	1.78
GERMANY, EAST	2.07	2.05	2.06	2.07	2.11	2.12	2.15	2.15
HUNGARY	0.34	0.34	0.32	0.33	0.33	0.33	0.30	0.30
POLAND	4.68	4.83	5.10	5.31	5.51	5.69	5.90	5.67
ROMANIA	0.38	0.38	0.38	0.37	0.38	0.41	0.46	0.44
U.S.S.R.	13.02	13.33	13.10	13.30	13.49	13.52	13.44	13.39
OTHER	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
TOTAL	**22.55**	**22.97**	**23.10**	**23.53**	**24.01**	**24.29**	**24.51**	**24.10**
AFRICA								
SOUTH AFRICA	1.47	1.56	1.64	1.82	2.01	2.13	2.44	2.70
ZIMBABWE	0.09	0.08	0.07	0.08	0.08	0.08	0.09	0.09
OTHER	0.05	0.04	0.05	0.05	0.04	0.05	0.07	0.08
TOTAL	**1.61**	**1.68**	**1.76**	**1.95**	**2.14**	**2.26**	**2.60**	**2.86**
MIDDLE EAST, FAR EAST AND OCEANIA								
AUSTRALIA	1.81	1.90	2.01	2.25	2.32	2.39	2.74	2.77
CHINA	11.23	11.83	12.30	12.66	13.09	14.71	15.08	14.72
INDIA	1.57	1.70	1.93	2.04	2.02	2.05	2.09	1.92
JAPAN	0.57	0.51	0.48	0.46	0.46	0.48	0.44	0.45
KOREA, NORTH	1.03	1.08	1.10	1.13	1.13	1.13	1.20	1.20
KOREA, SOUTH	0.29	0.32	0.37	0.35	0.36	0.38	0.38	0.38
TAIWAN	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.07
OTHER	0.22	0.26	0.26	0.30	0.31	0.30	0.35	0.36
TOTAL	**16.82**	**17.67**	**18.54**	**19.26**	**19.76**	**21.51**	**22.34**	**21.87**
WORLD TOTAL	**65.04**	**65.92**	**68.25**	**70.18**	**71.25**	**72.67**	**76.86**	**77.78**

[a]Preliminary.

Note: Includes anthracite, subantracite, bituminous, subbituminous, lignite, and brown coal.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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Table 6. WORLD HYDROELECTRIC POWER PRODUCTION (NET), 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	2.01	2.19	2.10	2.21	2.29	2.43	2.53	2.61
MEXICO	0.17	0.17	0.16	0.18	0.20	0.22	0.24	0.25
UNITED STATES	2.86	3.18	3.15	2.98	2.33	2.96	2.95	2.91
TOTAL	5.04	5.54	5.42	5.37	4.82	5.62	5.72	5.77
CENTRAL AND SOUTH AMERICA								
ARGENTINA	0.03	0.05	0.05	0.05	0.06	0.08	0.10	0.10
BRAZIL	0.61	0.68	0.77	0.86	0.97	1.07	1.11	1.14
CHILE	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08
COLOMBIA	0.06	0.09	0.10	0.11	0.11	0.13	0.14	0.14
PERU	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07
VENEZUELA	0.06	0.07	0.09	0.11	0.12	0.13	0.13	0.13
OTHER	0.06	0.06	0.08	0.09	0.09	0.10	0.11	0.11
TOTAL	0.96	1.10	1.21	1.33	1.48	1.64	1.73	1.78
WESTERN EUROPE								
AUSTRIA	0.20	0.23	0.24	0.21	0.26	0.26	0.28	0.28
FINLAND	0.11	0.13	0.13	0.10	0.12	0.10	0.10	0.10
FRANCE	0.49	0.59	0.62	0.51	0.79	0.71	0.70	0.72
GERMANY, WEST	0.16	0.18	0.18	0.14	0.18	0.19	0.19	0.19
GREECE	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
ITALY	0.40	0.41	0.44	0.42	0.55	0.49	0.50	0.49
NORWAY	0.75	0.79	0.80	0.84	0.74	0.83	0.92	0.86
PORTUGAL	0.08	0.08	0.07	0.05	0.10	0.11	0.12	0.12
SPAIN	0.30	0.32	0.27	0.23	0.42	0.43	0.44	0.44
SWEDEN	0.62	0.59	0.59	0.56	0.55	0.59	0.63	0.60
SWITZERLAND	0.30	0.30	0.35	0.28	0.38	0.34	0.33	0.33
YUGOSLAVIA	0.17	0.21	0.20	0.21	0.25	0.26	0.27	0.28
OTHER	0.12	0.13	0.15	0.18	0.19	0.20	0.20	0.20
TOTAL	3.72	4.00	4.06	3.76	4.55	4.54	4.71	4.67
EASTERN EUROPE AND U.S.S.R.								
CZECHOSLOVAKIA	0.02	0.04	0.04	0.04	0.05	0.04	0.04	0.05
ROMANIA	0.08	0.09	0.09	0.08	0.10	0.11	0.11	0.11
U.S.S.R.	1.26	1.36	1.30	1.40	1.51	1.75	1.85	2.06
OTHER	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.09
TOTAL	1.43	1.56	1.50	1.60	1.75	1.99	2.10	2.31
MIDDLE EAST								
IRAN	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
OTHER	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04
TOTAL	0.04	0.06	0.06	0.07	0.07	0.08	0.08	0.08
AFRICA								
EGYPT	0.05	0.06	0.07	0.08	0.09	0.10	0.10	0.10
ZAMBIA	0.05	0.06	0.06	0.07	0.09	0.08	0.09	0.09
ZIMBABWE	0.06	0.05	0.06	0.05	0.04	0.04	0.04	0.04
OTHER	0.18	0.19	0.20	0.23	0.26	0.29	0.34	0.35
TOTAL	0.35	0.37	0.39	0.44	0.47	0.51	0.57	0.57
FAR EAST AND OCEANIA								
AUSTRALIA	0.12	0.14	0.16	0.16	0.14	0.15	0.16	0.16
CHINA	[b]0.39	[b]0.44	[b]0.46	[b]0.53	[b]0.61	[b]0.69	0.75	0.77
INDIA	0.30	0.29	0.34	0.36	0.38	0.42	0.44	0.46
JAPAN	0.74	0.87	0.88	0.91	0.79	0.77	0.88	0.90
KOREA, NORTH	0.13	0.14	0.17	0.18	0.18	0.20	0.21	0.22
NEW ZEALAND	0.15	0.15	0.17	0.15	0.15	0.17	0.17	0.18
PAKISTAN	0.05	0.05	0.05	0.06	0.06	0.06	0.09	0.09
OTHER	0.12	0.13	0.14	0.16	0.16	0.16	0.17	0.18
TOTAL	1.99	2.21	2.38	2.50	2.46	2.61	2.86	2.96
WORLD TOTAL	13.52	14.83	15.02	15.06	15.60	16.97	17.77	18.14

[a]Preliminary.
[b]Estimated.
Sources: Refer to Appendix A.

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Table 7. WORLD NUCLEAR ELECTRIC POWER PRODUCTION (NET), 1973-1980

(Quadrillion [10^{15}] Btu)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH, CENTRAL AND SOUTH AMERICA								
CANADA	0.20	0.17	0.15	0.20	0.30	0.37	0.43	0.45
UNITED STATES	0.91	1.27	1.90	2.11	2.70	2.98	2.75	2.70
ARGENTINA	0.00	0.01	0.03	0.03	0.02	0.03	0.03	0.03
TOTAL	**1.11**	**1.45**	**2.07**	**2.34**	**3.02**	**3.37**	**3.20**	**3.18**
WESTERN EUROPE								
BELGIUM	0.00	(*)	0.07	0.10	0.12	0.12	0.11	0.12
FINLAND	0.00	0.00	0.00	0.00	0.03	0.03	0.07	0.07
FRANCE	0.13	0.18	0.22	0.19	0.21	0.35	0.44	0.66
GERMANY, WEST	0.13	0.11	0.22	0.25	0.36	0.32	0.40	0.44
ITALY	0.04	0.04	0.05	0.05	0.04	0.05	0.03	0.03
NETHERLANDS	(*)	0.03	0.03	0.04	0.04	0.04	0.04	0.04
SPAIN	0.07	0.08	0.08	0.08	0.07	0.08	0.07	0.06
SWEDEN	0.02	0.02	0.12	0.16	0.19	0.23	0.21	0.25
SWITZERLAND	0.06	0.07	0.08	0.08	0.08	0.08	0.12	0.14
UNITED KINGDOM	0.35	0.42	0.38	0.45	0.47	0.45	0.47	0.46
TOTAL	**0.80**	**0.95**	**1.24**	**1.39**	**1.61**	**1.77**	**1.96**	**2.27**
EASTERN EUROPE AND U.S.S.R.								
BULGARIA	0.00	0.01	0.03	0.05	0.06	0.07	0.07	0.06
CZECHOSLOVAKIA	(*)	0.01	(*)	0.01	(*)	(*)	0.03	0.06
GERMANY, EAST	(*)	0.02	0.03	0.06	0.06	0.07	0.09	0.11
U.S.S.R.	0.12	0.19	0.21	0.26	0.36	0.47	0.58	0.74
TOTAL	**0.13**	**0.23**	**0.27**	**0.38**	**0.48**	**0.61**	**0.76**	**0.97**
FAR EAST AND OCEANIA								
INDIA	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.03
JAPAN	0.10	0.19	0.17	0.38	0.28	0.52	0.63	0.83
KOREA, SOUTH	0.00	0.00	0.00	0.00	(*)	0.02	0.03	0.03
PAKISTAN	0.01	0.01	0.01	0.01	(*)	(*)	(*)	(*)
TAIWAN	0.00	0.00	0.00	0.00	(*)	0.03	0.06	0.08
TOTAL	**0.13**	**0.22**	**0.20**	**0.42**	**0.31**	**0.60**	**0.76**	**0.97**
WORLD TOTAL	**2.17**	**2.86**	**3.79**	**4.52**	**5.42**	**6.35**	**6.68**	**7.39**

[a]Preliminary.
*Denotes less than one-half the unit of measure.
Note: No production is reported for Africa or the Middle East.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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World Primary Energy Production in Barrels, Cubic Feet, Short Tons, and Kilowatt Hours

Table 8. WORLD CRUDE OIL PRODUCTION, 1973-1980

(Thousand Barrels per Day)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	1,800	1,684	1,439	1,295	1,320	1,313	1,496	1,424
MEXICO	465	571	705	831	981	1,209	1,461	1,937
UNITED STATES	9,208	8,774	8,375	8,132	8,245	8,707	8,552	8,597
TOTAL	**11,473**	**11,029**	**10,519**	**10,258**	**10,546**	**11,229**	**11,509**	**11,958**
CENTRAL AND SOUTH AMERICA								
ARGENTINA	420	414	395	398	431	463	473	491
BRAZIL	189	176	177	167	161	160	166	181
COLOMBIA	184	168	157	146	138	131	124	125
ECUADOR	209	177	161	188	183	202	214	204
PERU	74	79	70	76	102	151	195	195
TRINIDAD AND TOBAGO	165	185	205	224	230	232	215	211
VENEZUELA	3,366	2,976	2,346	2,294	2,238	2,166	2,356	2,167
OTHER	82	76	70	70	63	57	61	67
TOTAL	**4,669**	**4,252**	**3,581**	**3,563**	**3,547**	**3,552**	**3,806**	**3,841**
WESTERN EUROPE								
NORWAY	32	35	189	279	280	356	403	528
UNITED KINGDOM	2	2	12	245	768	1,082	1,568	1,622
OTHER	416	416	397	392	371	379	384	293
TOTAL	**450**	**453**	**598**	**916**	**1,419**	**1,817**	**2,355**	**2,443**
EASTERN EUROPE AND U.S.S.R.								
ROMANIA	296	300	302	304	303	284	255	238
U.S.S.R.	8,465	9,000	9,625	10,143	10,682	11,185	11,460	11,770
OTHER	93	96	96	96	98	100	97	96
TOTAL	**8,854**	**9,396**	**10,023**	**10,543**	**11,082**	**11,570**	**11,812**	**12,104**
MIDDLE EAST								
IRAN	5,861	6,022	5,350	5,883	5,663	5,242	3,168	1,662
IRAQ	2,018	1,971	2,262	2,415	2,348	2,563	3,477	2,514
KUWAIT	3,020	2,546	2,084	2,145	1,969	2,131	2,500	1,656
QATAR	570	518	438	497	445	487	508	472
SAUDI ARABIA	7,596	8,480	7,075	8,577	9,245	8,301	9,532	9,900
SYRIA	105	124	170	175	188	170	166	163
UNITED ARAB EMIRATES	1,533	1,679	1,664	1,936	1,999	1,831	1,831	1,709
OTHER	363	457	480	427	399	378	376	331
TOTAL	**21,066**	**21,796**	**19,522**	**22,056**	**22,255**	**21,101**	**21,558**	**18,407**
AFRICA								
ALGERIA	1,097	1,009	983	1,075	1,152	1,161	1,154	1,012
ANGOLA	162	169	165	108	194	131	147	150
EGYPT	165	150	235	330	415	485	525	595
GABON	150	202	223	223	222	209	203	175
LIBYA	2,175	1,521	1,480	1,933	2,063	1,983	2,092	1,787
NIGERIA	2,054	2,255	1,783	2,067	2,085	1,897	2,302	2,055
OTHER	125	117	136	131	153	154	213	257
TOTAL	**5,929**	**5,422**	**5,005**	**5,866**	**6,285**	**6,019**	**6,636**	**6,031**
FAR EAST AND OCEANIA								
AUSTRALIA	369	388	409	426	431	432	441	380
BRUNEI	216	193	181	203	210	205	234	235
CHINA	1,090	1,315	1,490	1,670	1,874	2,082	2,122	2,114
INDIA	147	156	165	175	199	226	245	182
INDONESIA	1,339	1,375	1,307	1,504	1,686	1,635	1,591	1,577
MALAYSIA	91	81	98	165	184	217	283	283
OTHER	57	54	55	60	77	79	107	96
TOTAL	**3,308**	**3,561**	**3,704**	**4,203**	**4,661**	**4,877**	**5,023**	**4,867**
WORLD TOTAL	**55,748**	**55,910**	**52,952**	**57,405**	**59,795**	**60,165**	**62,698**	**59,452**

[a]Preliminary.

Note: Includes lease condensate.

Sources: Refer to Appendix A.

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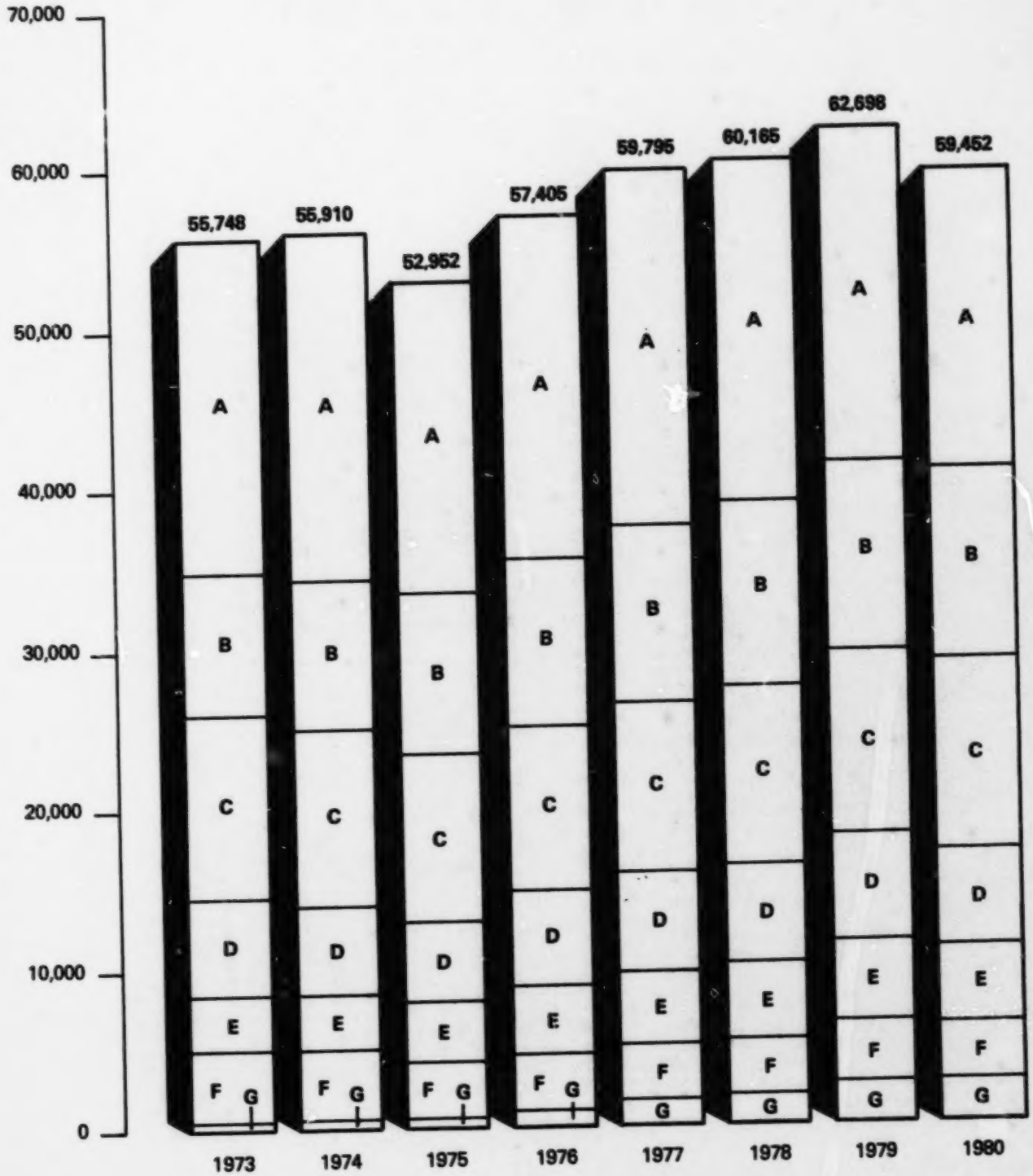
WORLD CRUDE OIL PRODUCTION

(Thousand Barrels per Day)



Regions

A Middle East
B Eastern Europe and U.S.S.R.
C North America
D Africa
E Far East and Oceania
F Central and South America
G Western Europe

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Table 9. WORLD NATURAL GAS PLANT LIQUIDS PRODUCTION, 1973-1980

(Thousand Barrels per Day)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	320	310	310	285	290	265	290	335
MEXICO	75	80	80	95	105	115	150	185
UNITED STATES	1,738	1,688	1,633	1,603	1,618	1,567	1,584	1,564
TOTAL	2,133	2,078	2,023	1,983	2,013	1,947	2,024	2,084
CENTRAL AND SOUTH AMERICA								
ARGENTINA	11	11	11	13	11	13	13	13
BOLIVIA	4	4	4	4	5	5	5	5
BRAZIL	7	7	7	5	6	5	5	5
CHILE	7	7	7	7	12	12	12	12
COLOMBIA	11	11	11	10	6	5	5	5
VENEZUELA	90	85	75	75	80	80	80	80
OTHER	6	6	6	6	5	7	7	7
TOTAL	136	131	121	120	125	127	127	127
WESTERN EUROPE								
FRANCE	26	27	26	26	26	26	26	26
NETHERLANDS	7	6	7	7	7	7	7	7
NORWAY	(*)	(*)	5	20	20	35	40	40
SPAIN	4	4	7	9	7	8	6	6
UNITED KINGDOM	5	5	15	15	30	40	45	45
OTHER	3	2	2	2	2	3	3	3
TOTAL	45	45	62	79	92	119	127	127
EASTERN EUROPE AND U.S.S.R.								
HUNGARY	4	5	6	8	11	15	19	19
ROMANIA	10	10	11	11	11	11	11	11
U.S.S.R.	147	246	252	296	311	326	334	343
OTHER	1	1	1	1	(*)	1	1	1
TOTAL	161	262	269	316	333	352	364	374
MIDDLE EAST								
IRAN	40	45	45	45	40	45	10	6
IRAQ	(*)	(*)	(*)	(*)	5	5	10	10
KUWAIT	60	50	50	50	55	75	125	125
QATAR	(*)	5	10	10	5	5	10	10
SAUDI ARABIA	90	130	140	185	215	250	303	369
UNITED ARAB EMIRATES	(*)	(*)	(*)	(*)	15	30	30	30
TOTAL	191	231	246	291	335	410	488	550
AFRICA								
ALGERIA	30	50	60	65	65	100	140	150
EGYPT	1	1	1	3	12	17	17	17
LIBYA	35	20	30	40	40	40	40	40
TOTAL	66	71	91	108	117	157	197	207
FAR EAST AND OCEANIA								
AUSTRALIA	50	50	50	50	55	60	60	60
BRUNEI	10	15	20	25	30	30	35	35
INDONESIA	(*)	(*)	(*)	10	10	30	40	40
OTHER	3	3	3	3	3	4	4	4
TOTAL	63	68	73	88	98	124	139	139
WORLD TOTAL	2,795	2,885	2,885	2,986	3,114	3,232	3,466	3,606

[a]Preliminary.
*Denotes less than one-half the unit of measure.
Sources: Refer to Appendix A.

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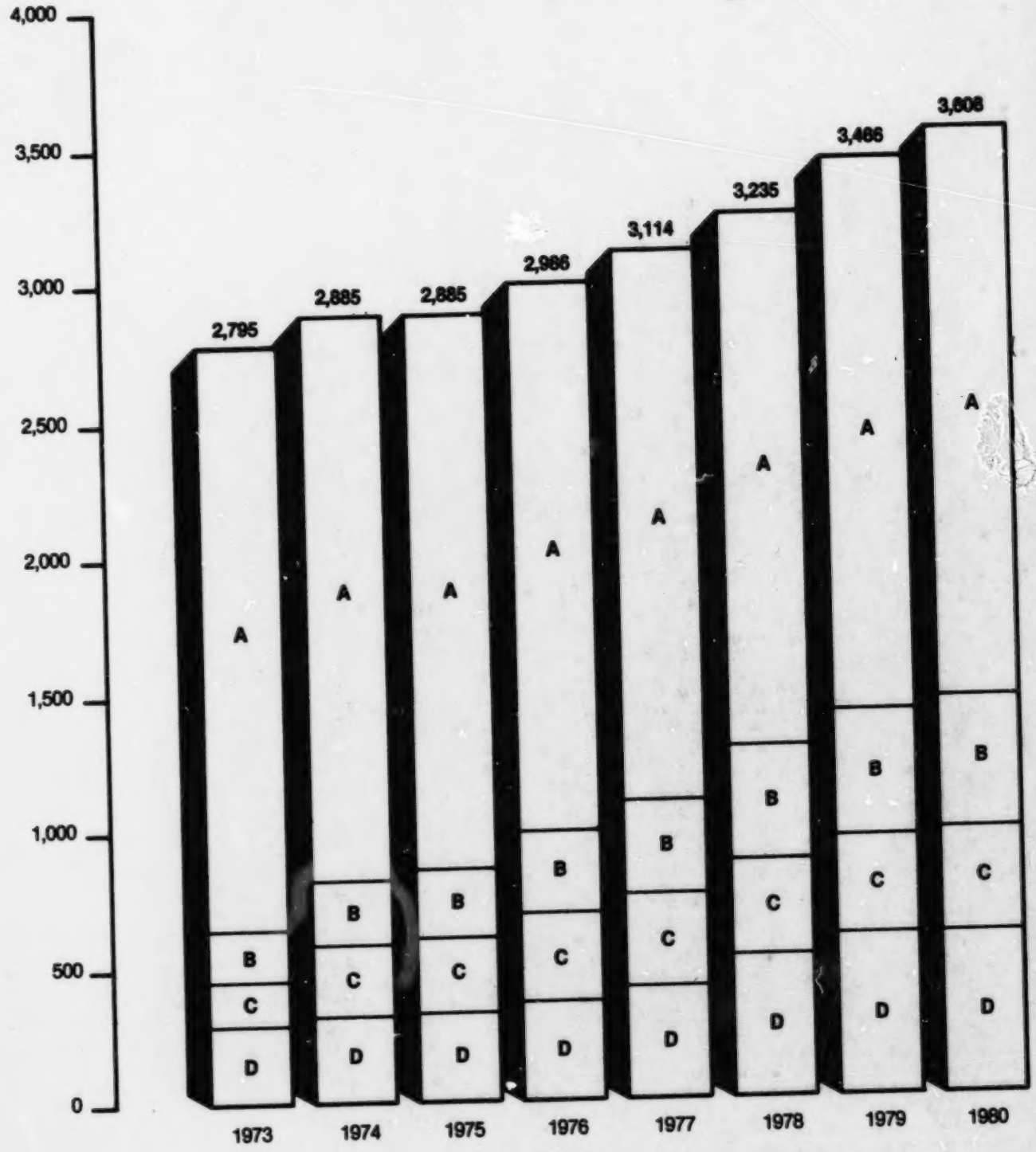
WORLD NATURAL GAS PLANT LIQUIDS PRODUCTION

(Thousand Barrels per Day)



Regions

A North America
B Middle East
C Eastern Europe and U.S.S.R.
D Other

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Table 10. WORLD NATURAL GAS PRODUCTION (DRY), 1973-1980

(Trillion Cubic Feet)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	2.45	2.42	2.45	2.46	2.59	2.47	2.66	2.47
MEXICO	0.48	0.50	0.52	0.51	0.53	1.03	0.75	1.40
UNITED STATES	21.73	20.71	19.24	19.10	19.16	19.12	19.66	19.35
TOTAL	**24.66**	**23.63**	**22.20**	**22.07**	**22.28**	**22.63**	**23.08**	**23.22**
CENTRAL AND SOUTH AMERICA								
ARGENTINA	0.24	0.26	0.27	0.27	0.28	0.28	0.31	0.34
BOLIVIA	0.06	0.06	0.06	0.06	0.07	0.06	0.07	0.07
CHILE	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
COLOMBIA	0.06	0.06	0.06	0.06	0.07	0.07	0.12	0.13
TRINIDAD AND TOBAGO	0.06	0.06	0.05	0.06	0.07	0.06	0.16	0.19
VENEZUELA	0.46	0.48	0.45	0.48	0.52	0.52	0.54	0.52
OTHER	0.02	0.04	0.04	0.05	0.06	0.06	0.06	0.08
TOTAL	**0.95**	**0.99**	**0.98**	**1.03**	**1.12**	**1.13**	**1.30**	**1.38**
WESTERN EUROPE								
FRANCE	0.27	0.27	0.27	0.26	0.28	0.28	0.28	0.27
GERMANY, WEST	0.71	0.73	0.67	0.68	0.68	0.72	0.74	0.65
ITALY	0.54	0.54	0.52	0.55	0.48	0.48	0.48	0.43
NETHERLANDS	2.50	2.96	3.21	3.44	3.42	3.14	3.41	2.99
NORWAY	0.00	(*)	0.01	0.01	0.09	0.39	0.76	0.91
UNITED KINGDOM	1.00	1.21	1.26	1.32	1.38	1.31	1.36	1.27
OTHER	0.13	0.13	0.14	0.14	0.16	0.16	0.14	0.13
TOTAL	**5.15**	**5.84**	**6.07**	**6.40**	**6.50**	**6.48**	**7.17**	**6.84**
EASTERN EUROPE AND U.S.S.R.								
GERMANY, EAST	0.25	0.27	0.26	0.30	0.30	0.30	0.31	0.31
HUNGARY	0.17	0.18	0.18	0.21	0.23	0.26	0.23	0.22
POLAND	0.21	0.20	0.21	0.24	0.26	0.28	0.26	0.22
ROMANIA	0.93	0.96	1.04	1.14	1.20	1.07	1.27	1.18
U.S.S.R.	8.35	9.20	10.22	11.33	12.22	13.14	14.36	15.36
OTHER	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04
TOTAL	**9.95**	**10.86**	**11.95**	**13.27**	**14.26**	**15.10**	**16.47**	**17.32**
MIDDLE EAST								
BAHRAIN	0.06	0.07	0.07	0.08	0.08	0.08	0.11	0.09
IRAN	0.63	0.73	0.72	0.74	0.76	1.04	0.51	0.29
KUWAIT	0.19	0.19	0.18	0.20	0.21	0.23	0.21	0.29
SAUDI ARABIA	0.16	0.22	0.22	0.29	0.33	0.36	0.39	0.31
UNITED ARAB EMIRATES	0.03	0.04	0.08	0.06	0.19	0.17	0.08	0.12
OTHER	0.11	0.10	0.15	0.14	0.12	0.12	0.14	0.07
TOTAL	**1.18**	**1.34**	**1.42**	**1.50**	**1.72**	**2.00**	**1.44**	**1.17**
AFRICA								
ALGERIA	0.17	0.20	0.21	0.35	0.29	0.49	0.52	0.52
LIBYA	0.11	0.10	0.12	0.13	0.14	0.17	0.18	0.19
OTHER	0.04	0.05	0.04	0.05	0.07	0.08	0.08	0.07
TOTAL	**0.32**	**0.34**	**0.37**	**0.54**	**0.50**	**0.74**	**0.78**	**0.78**
FAR EAST AND OCEANIA								
AUSTRALIA	0.14	0.17	0.18	0.21	0.24	0.26	0.30	0.34
BRUNEI	0.07	0.15	0.19	0.25	0.29	0.30	0.32	0.35
CHINA	0.25	0.29	0.33	0.36	0.44	0.48	0.51	0.50
INDONESIA	0.03	0.04	0.08	0.13	0.20	0.20	0.39	0.39
JAPAN	0.09	0.09	0.09	0.09	0.10	0.09	0.10	0.09
PAKISTAN	0.13	0.15	0.16	0.16	0.18	0.19	0.20	0.29
OTHER	0.23	0.24	0.25	0.28	0.32	0.34	0.32	0.30
TOTAL	**0.94**	**1.12**	**1.28**	**1.48**	**1.76**	**1.86**	**2.14**	**2.26**
WORLD TOTAL	**43.15**	**44.12**	**44.26**	**48.28**	**48.13**	**49.94**	**52.36**	**52.77**

[a]Preliminary.
*Denotes less than one-half the unit of measure.
Note: Sum of components may not equal total due to independent rounding.
Note: Temperature and pressure at measurement are not reported.
Sources: Refer to Appendix A.

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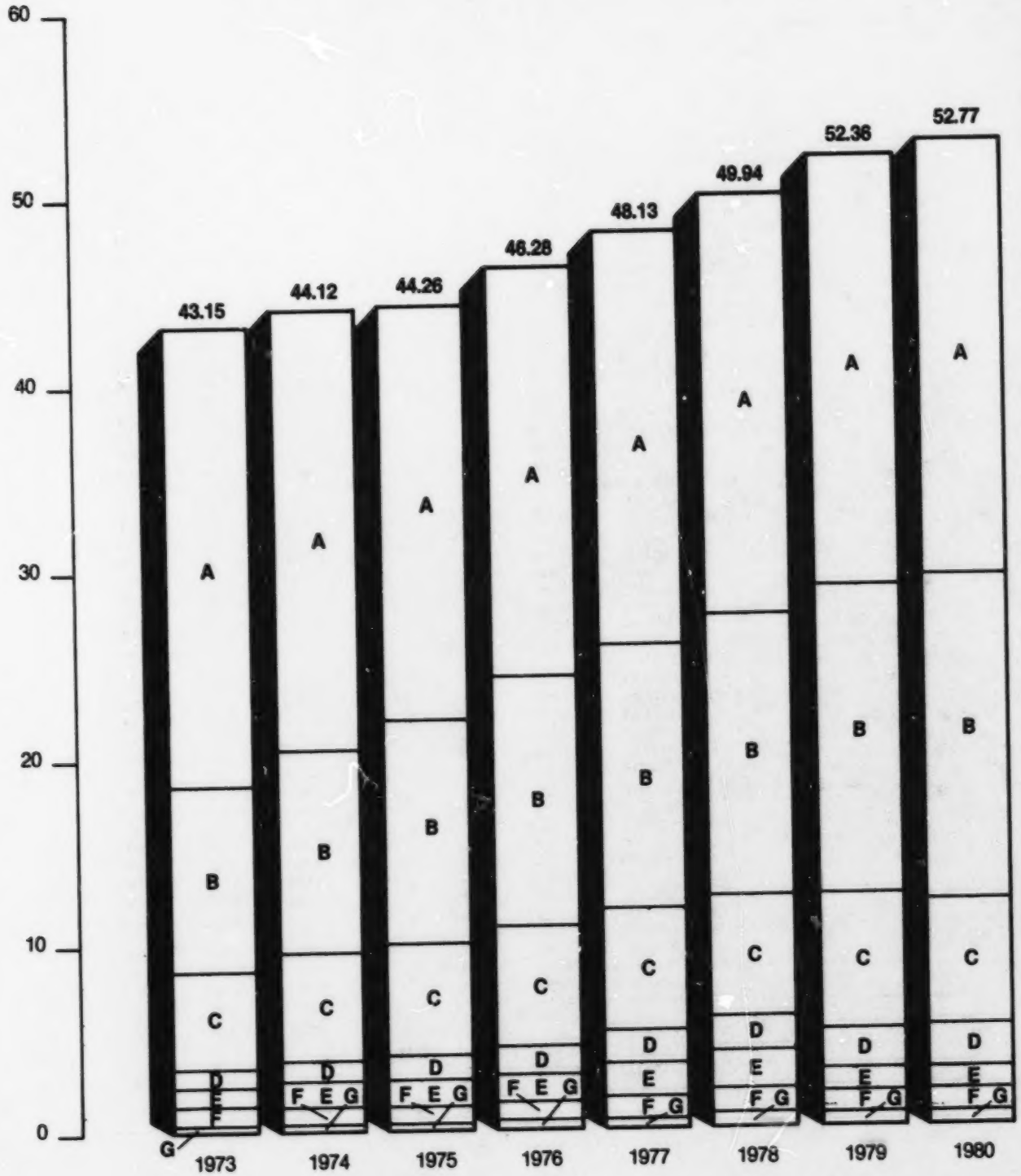
WORLD NATURAL GAS PRODUCTION (DRY)
(Trillion Cubic Feet)



Regions

A North America
B Eastern Europe and U.S.S.R.
C Western Europe
D Far East and Oceania
E Middle East
F Central and South America
G Africa

BEST DOCUMENT AVAILABLE

Table 11. WORLD COAL PRODUCTION, 1973-1980

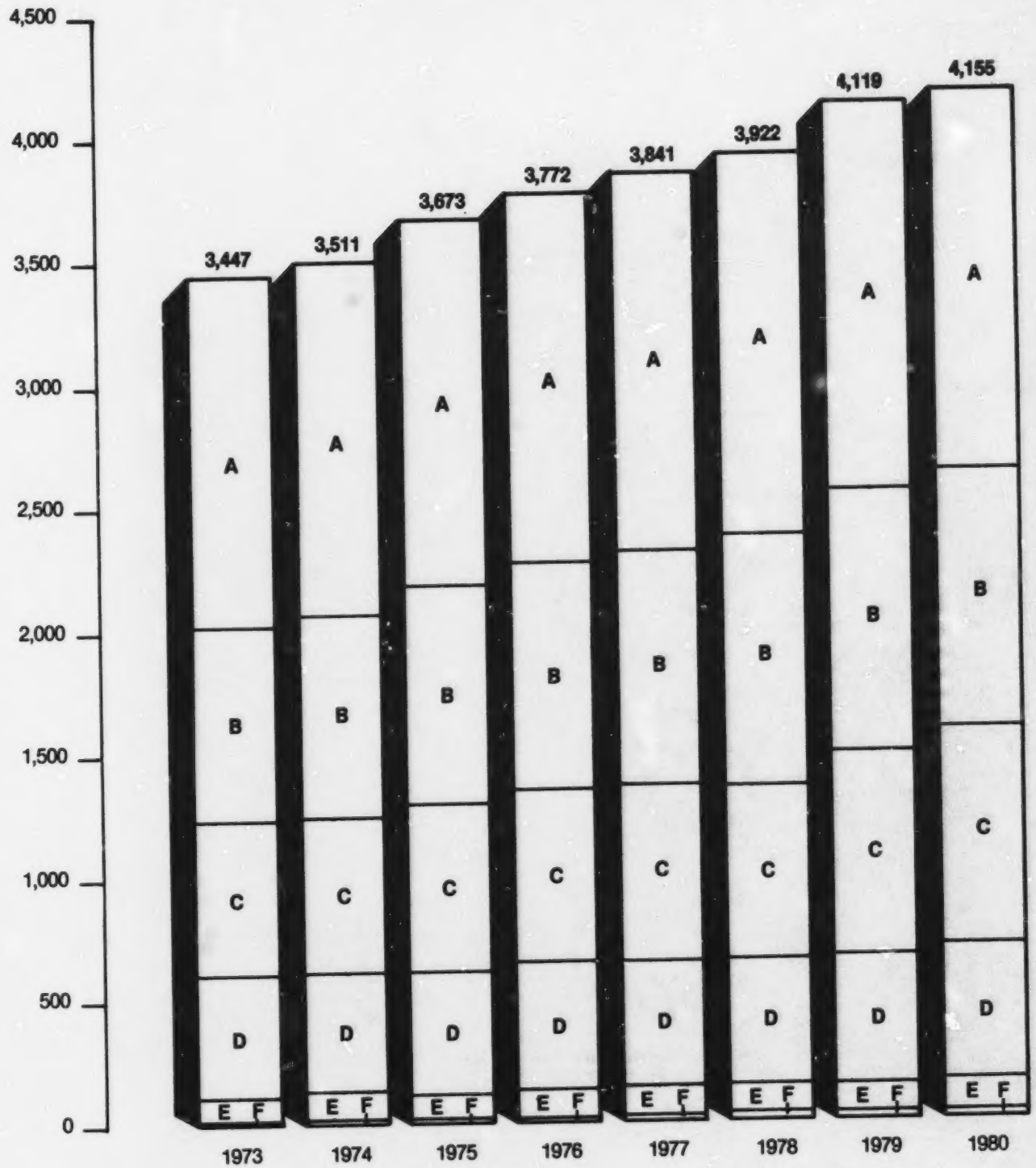
(Million Short Tons)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	23	23	28	28	32	34	33	37
MEXICO	5	6	6	6	7	8	8	8
UNITED STATES	599	610	655	685	697	670	781	835
TOTAL	626	639	688	719	736	711	822	880
CENTRAL AND SOUTH AMERICA								
BRAZIL	2	3	3	4	4	4	5	5
COLOMBIA	4	3	4	4	4	4	6	6
OTHER	2	2	2	2	2	2	2	1
TOTAL	8	9	9	10	10	10	13	12
WESTERN EUROPE								
BELGIUM	10	9	8	8	8	7	7	7
FRANCE	31	28	28	28	27	26	23	23
GERMANY, WEST	238	244	238	247	229	228	239	239
GREECE	14	16	20	25	26	25	26	26
SPAIN	14	15	15	16	19	22	24	26
TURKEY	12	11	12	11	13	15	22	23
UNITED KINGDOM	143	121	142	137	135	136	135	141
YUGOSLAVIA	36	37	39	41	43	44	46	50
OTHER	8	8	7	7	6	6	6	6
TOTAL	508	488	509	518	506	509	529	541
EASTERN EUROPE AND U.S.S.R.								
BULGARIA	30	27	31	28	28	28	31	28
CZECHOSLOVAKIA	120	122	127	130	134	136	137	133
GERMANY, EAST	272	269	272	273	280	279	282	282
HUNGARY	29	28	27	28	28	28	28	28
POLAND	216	222	233	241	250	258	264	254
ROMANIA	27	30	30	28	30	32	36	35
U.S.S.R.	736	755	773	784	796	798	792	789
OTHER	1	1	1	1	1	1	1	1
TOTAL	1,431	1,454	1,494	1,513	1,546	1,560	1,571	1,550
AFRICA								
SOUTH AFRICA	69	73	77	85	94	100	114	126
ZIMBABWE	3	3	3	3	3	3	4	3
OTHER	3	3	3	3	3	3	3	3
TOTAL	75	79	82	91	100	106	120	132
MIDDLE EAST, FAR EAST AND OCEANIA								
AUSTRALIA	94	100	105	117	119	124	139	140
CHINA	520	548	570	586	606	681	699	682
INDIA	89	96	109	116	115	116	118	109
JAPAN	25	22	26	20	20	21	19	20
KOREA, NORTH	41	43	44	45	45	45	48	48
KOREA, SOUTH	15	17	19	18	19	20	20	20
TAIWAN	4	3	3	4	3	3	3	3
OTHER	12	13	13	15	16	16	18	19
TOTAL	800	842	890	921	942	1,026	1,063	1,040
WORLD TOTAL	3,447	3,511	3,673	3,772	3,841	3,922	4,119	4,155

[a]Preliminary.
Note: Includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

BEST DOCUMENT AVAILABLE

WORLD COAL PRODUCTION
(Million Short Tons)



Regions

A Eastern Europe and U.S.S.R.
B Middle East, Far East, and Oceania
C North America
D Western Europe
E Africa
F Central and South America

BEST DOCUMENT AVAILABLE

Table 12. WORLD HYDROELECTRIC POWER PRODUCTION (NET), 1973-1980

(Billion Kilowatt Hours)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH AMERICA								
CANADA	192.84	210.94	202.40	212.79	220.27	234.03	243.04	251.00
MEXICO	16.23	16.71	15.14	17.19	19.08	21.53	23.17	24.00
UNITED STATES	275.43	304.21	303.15	286.92	223.60	283.47	283.08	279.18
TOTAL	**484.51**	**531.86**	**520.69**	**516.90**	**462.94**	**539.03**	**549.29**	**554.18**
CENTRAL AND SOUTH AMERICA								
ARGENTINA	2.96	4.98	5.14	4.95	5.71	7.67	9.78	9.90
BRAZIL	58.29	65.49	73.84	82.36	92.94	102.75	106.90	110.00
CHILE	5.27	5.99	6.07	6.17	6.44	6.75	7.15	7.23
COLOMBIA	8.01	8.92	9.75	10.27	10.51	12.10	13.17	13.36
PERU	4.72	5.17	5.41	5.74	5.97	6.61	6.88	6.93
VENEZUELA	6.10	7.06	8.81	10.45	11.81	12.03	12.38	12.87
OTHER	7.23	7.74	7.74	8.40	8.57	9.68	10.19	10.54
TOTAL	**92.59**	**105.35**	**116.77**	**128.35**	**141.96**	**157.60**	**166.45**	**170.83**
WESTERN EUROPE								
AUSTRIA	18.97	22.43	23.51	20.31	24.62	24.64	26.80	27.22
FINLAND	10.41	12.51	12.03	9.34	12.00	9.74	9.81	9.90
FRANCE	47.54	56.83	59.89	48.65	76.14	68.54	66.99	69.70
GERMANY, WEST	15.27	17.62	16.85	13.82	17.32	18.20	18.22	18.43
GREECE	2.20	2.32	1.99	1.86	1.90	2.96	3.69	3.76
ITALY	38.90	39.13	42.35	40.70	52.48	47.14	47.94	47.28
NORWAY	72.16	75.88	76.64	81.22	71.48	80.16	87.98	83.00
PORTUGAL	7.28	7.81	6.37	4.84	9.91	10.60	11.63	11.88
SPAIN	29.23	31.03	26.17	22.28	40.33	41.08	41.85	41.98
SWEDEN	59.20	56.62	56.98	54.17	52.80	57.05	60.19	57.77
SWITZERLAND	28.82	28.56	33.97	26.62	36.29	32.51	31.95	32.00
YUGOSLAVIA	16.23	20.45	19.12	20.35	24.11	24.95	26.29	26.73
OTHER	11.37	12.95	14.59	17.45	17.95	18.89	19.64	19.71
TOTAL	**357.59**	**384.15**	**390.49**	**361.60**	**437.35**	**436.46**	**452.98**	**449.36**
EASTERN EUROPE AND U.S.S.R.								
CZECHOSLOVAKIA	2.38	4.00	3.78	3.43	4.33	4.05	4.16	4.45
ROMANIA	7.47	8.39	8.63	8.03	9.25	10.51	10.59	10.69
U.S.S.R.	121.12	130.71	124.73	134.38	145.54	168.00	178.20	198.00
OTHER	6.45	7.08	7.48	7.81	8.88	8.45	9.00	8.76
TOTAL	**137.42**	**150.19**	**144.61**	**153.64**	**168.01**	**191.01**	**201.95**	**221.91**
MIDDLE EAST								
IRAN	2.81	3.39	3.41	3.93	3.96	3.96	3.96	3.96
OTHER	0.78	1.53	2.08	2.61	3.11	3.54	3.60	3.61
TOTAL	**3.59**	**4.92**	**5.49**	**6.54**	**7.07**	**7.50**	**7.56**	**7.57**
AFRICA								
EGYPT	5.10	6.06	6.73	7.99	8.95	9.23	9.41	9.50
ZAMBIA	4.83	5.74	5.94	6.84	8.54	7.74	8.28	8.50
ZIMBABWE	5.59	5.17	5.32	4.86	3.45	3.81	4.00	4.00
OTHER	17.79	18.37	19.05	22.27	25.84	27.98	32.86	33.26
TOTAL	**33.32**	**35.34**	**37.05**	**41.96**	**46.79**	**48.77**	**54.55**	**55.26**
FAR EAST AND OCEANIA								
AUSTRALIA	11.91	13.57	15.06	15.43	13.58	14.39	15.05	15.44
CHINA	37.62	42.57	44.55	50.49	58.41	66.33	72.27	74.25
INDIA	28.69	27.60	32.98	34.50	36.80	40.01	42.02	44.55
JAPAN	70.96	83.93	85.05	87.51	75.51	73.90	84.19	87.00
KOREA, NORTH	12.38	13.86	16.33	16.83	17.32	19.30	20.29	20.79
NEW ZEALAND	14.01	14.05	16.70	14.77	14.44	16.07	16.33	16.83
PAKISTAN	4.54	4.39	4.61	5.71	5.45	5.83	8.27	8.32
OTHER	11.15	12.61	14.19	15.07	15.14	14.99	16.67	17.36
TOTAL	**191.25**	**212.60**	**229.48**	**240.30**	**236.65**	**250.83**	**275.10**	**284.54**
WORLD TOTAL	**1,300.26**	**1,424.40**	**1,444.58**	**1,449.29**	**1,500.77**	**1,631.19**	**1,707.87**	**1,743.66**

[a]Preliminary.

Note: World hydroelectric power production includes industrial and utility production of hydroelectric power.

Sources: Refer to Appendix A.

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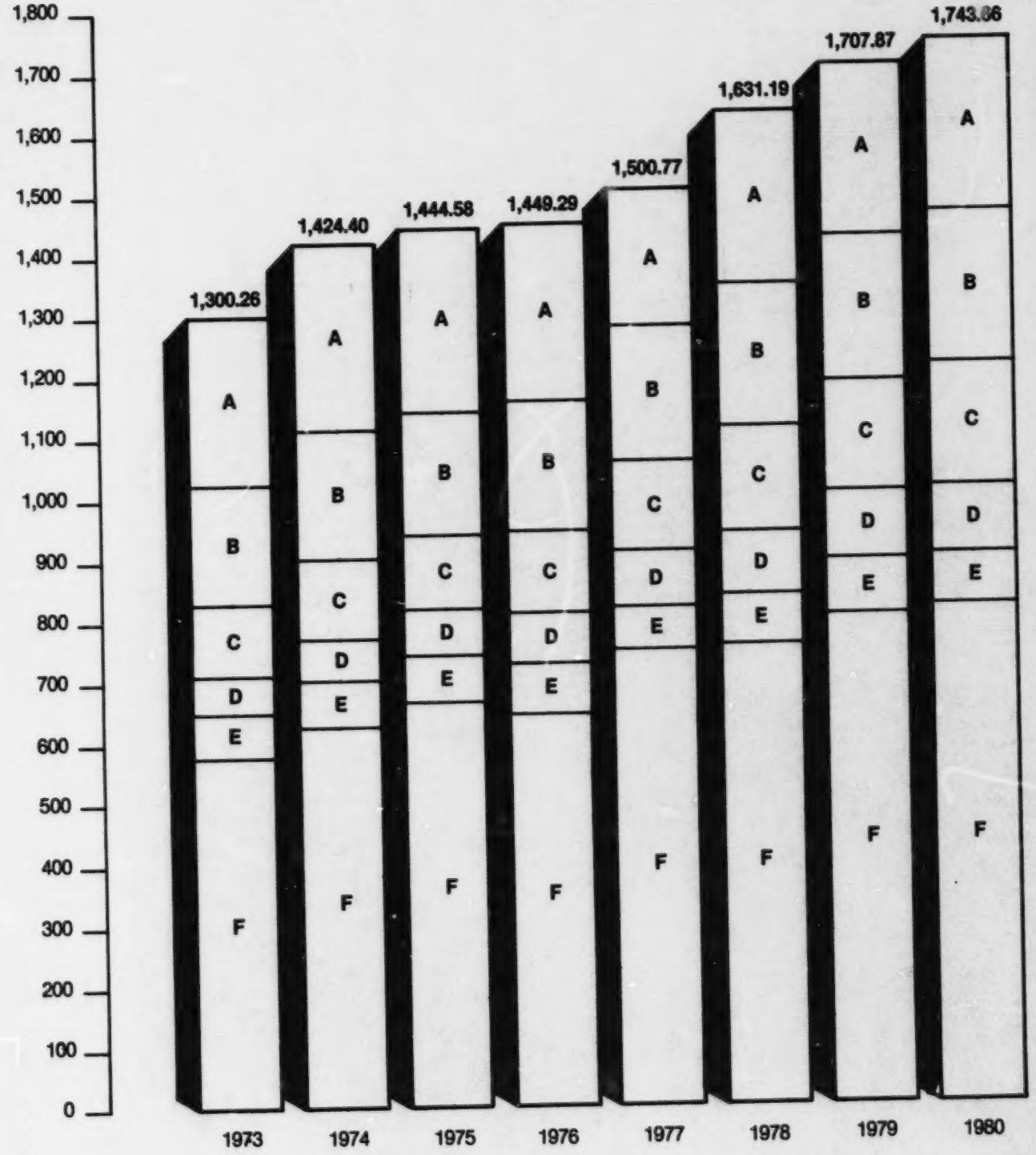
WORLD HYDROELECTRIC POWER PRODUCTION (NET)

(Billion Kilowatt Hours)



Countries

A United States
B Canada
C U.S.S.R.
D Brazil
E Norway
F Other

BEST DOCUMENT AVAILABLE

Table 13. WORLD NUCLEAR ELECTRIC POWER PRODUCTION (NET), 1973-1980

(Billion Kilowatt Hours)

REGION AND COUNTRY	1973	1974	1975	1976	1977	1978	1979	1980[a]
NORTH, CENTRAL AND SOUTH AMERICA								
CANADA	17.36	14.64	12.58	17.11	25.42	31.28	36.46	38.35
UNITED STATES	83.48	113.98	172.51	191.10	250.88	276.40	255.16	251.12
ARGENTINA	0.00	0.98	2.39	2.44	1.55	2.75	2.56	2.22
TOTAL	100.84	129.60	187.48	210.66	277.86	310.43	294.18	291.69
WESTERN EUROPE								
BELGIUM	0.00	0.11	6.42	9.51	11.26	11.87	10.80	11.86
FINLAND	0.00	0.00	0.00	0.00	2.54	3.12	6.34	6.63
FRANCE	11.04	13.97	17.38	14.76	17.04	29.02	37.93	58.17
GERMANY, WEST	11.31	11.44	20.59	23.30	34.02	34.09	40.07	41.49
ITALY	2.98	3.24	3.61	3.62	3.21	4.21	2.50	2.10
NETHERLANDS	1.05	3.11	3.17	3.68	3.52	3.86	3.31	3.99
SPAIN	6.22	6.86	7.17	7.18	6.20	7.27	6.36	4.93
SWEDEN	2.00	1.56	11.42	15.19	18.90	22.59	19.99	23.89
SWITZERLAND	5.88	6.68	7.33	7.50	7.67	7.93	11.26	13.63
UNITED KINGDOM	26.60	32.32	28.98	34.97	36.17	34.83	36.55	35.33
TOTAL	67.09	79.30	106.08	119.71	140.54	158.78	175.11	202.03
EASTERN EUROPE AND U.S.S.R.								
BULGARIA	0.00	0.88	2.42	4.74	5.59	5.61	5.89	5.70
CZECHOSLOVAKIA	0.22	0.47	0.18	0.42	0.10	0.10	1.80	4.37
GERMANY, EAST	0.33	2.07	2.60	5.01	4.95	6.29	9.31	10.35
U.S.S.R.	11.12	17.10	19.19	23.75	32.30	42.47	52.06	65.07
TOTAL	11.67	20.52	24.39	33.92	42.94	54.47	69.06	85.50
FAR EAST AND OCEANIA								
INDIA	1.84	2.35	2.39	3.03	2.64	2.15	3.05	2.73
JAPAN	8.97	17.19	21.09	35.00	26.73	50.53	58.90	76.98
KOREA, SOUTH	0.00	0.00	0.00	0.00	0.07	2.21	2.99	3.30
PAKISTAN	0.43	0.55	0.52	0.46	0.32	0.22	0.03	0.08
TAIWAN	0.00	0.00	0.00	0.00	0.09	2.54	6.01	7.79
TOTAL	11.24	20.10	23.99	38.50	29.85	57.64	70.99	90.88
WORLD TOTAL	190.84	249.52	341.94	402.79	491.19	581.33	609.35	670.11

[a]Preliminary.
Note: No production is reported for Africa or the Middle East.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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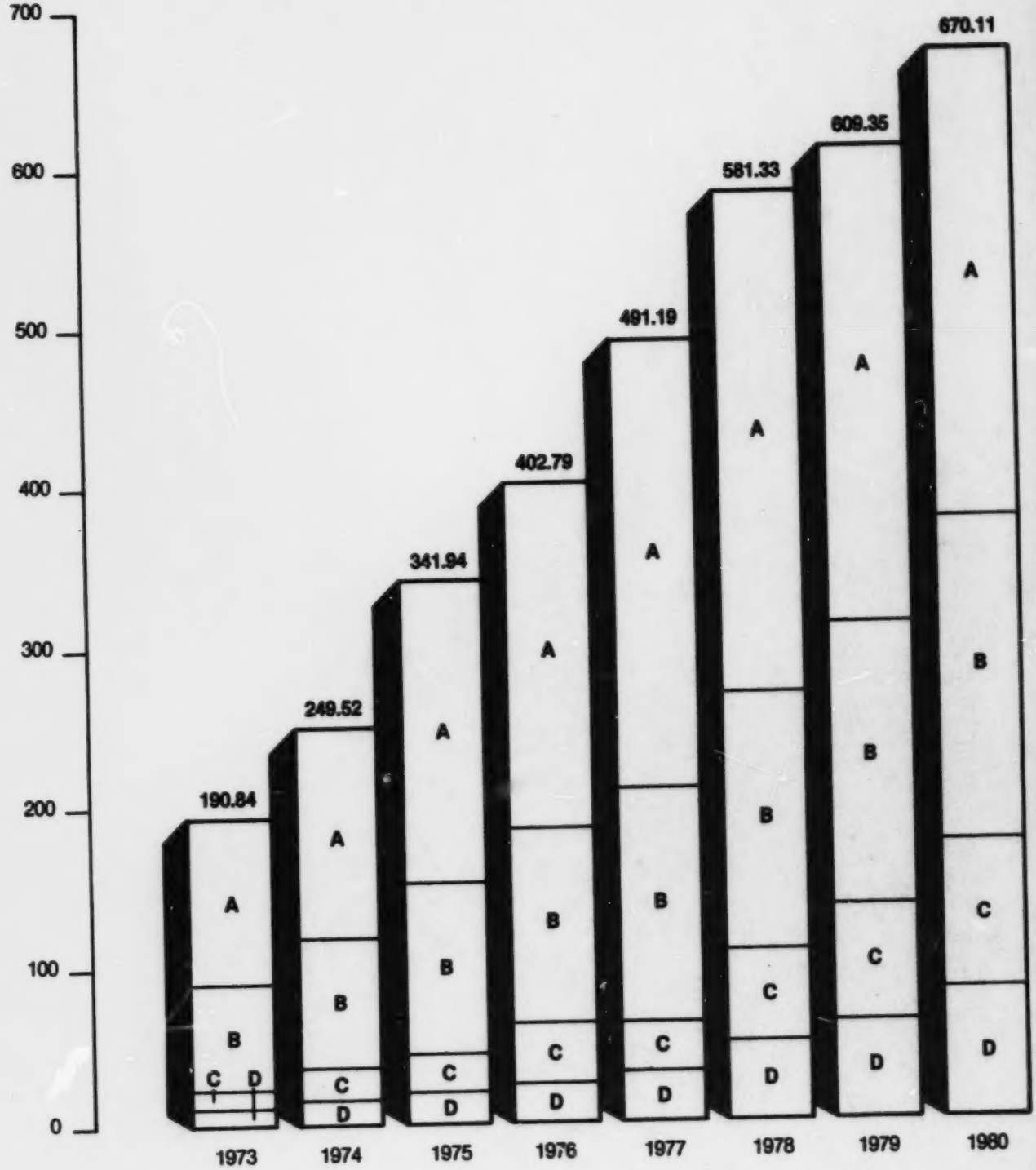
WORLD NUCLEAR ELECTRIC POWER PRODUCTION (NET)
(Billion Kilowatt Hours)



Regions

A North, Central, and South America
B Western Europe
C Far East and Oceania
D Eastern Europe and U.S.S.R.

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World Petroleum Supply, Disposition, and Refining Capacity

Table 14. WORLD PETROLEUM SUPPLY AND DISPOSITION, 1979

(Thousand Barrels per Day)

REGION AND COUNTRY	PRIMARY SUPPLY			DISPOSITION			
	Crude Oil[a] Production	Crude Oil Imports	Refined Petroleum Product Imports	Crude Oil Exports	Refined Petroleum Product Exports	Apparent Consumption (Including Bunkers)	Bunkers
NORTH AMERICA							
CANADA	1,786	610	21	289	113	1,857	56
MEXICO	1,611	0	27	533	68	904	1
UNITED STATES	10,136	6,519	1,937	235	236	18,513	617
OTHER	0	0	6	0	0	6	3
TOTAL	13,533	7,130	1,991	1,056	417	21,280	677
CENTRAL AND SOUTH AMERICA							
ARGENTINA	486	35	42	0	10	532	7
BAHAMA ISLANDS	0	274	16	12	119	41	10
BRAZIL	171	1,026	19	5	22	1,175	26
CHILE	35	50	(*)	0	1	106	9
COLOMBIA	129	25	29	0	25	163	9
CUBA	7	124	37	0	0	162	0
ECUADOR	216	0	7	123	26	69	5
NETHERLANDS ANTILLES	0	507	46	20	522	96	43
PANAMA REPUBLIC	0	43	52	0	9	88	16
PERU	197	0	1	52	17	126	1
PUERTO RICO	0	257	20	0	92	202	4
TRINIDAD AND TOBAGO	217	141	2	121	171	58	9
VENEZUELA	2,436	0	2	1,412	618	279	19
VIRGIN ISLANDS	0	540	6	0	431	121	19
OTHER	38	147	93	130	13	276	13
TOTAL	3,932	3,169	372	1,878	2,076	3,492	183
WESTERN EUROPE							
AUSTRIA	35	177	35	0	6	242	1
BELGIUM AND LUXEMBOURG	0	673	236	(*)	294	638	58
DENMARK	8	160	186	12	56	318	21
FINLAND	0	256	60	10	22	280	14
FRANCE	46	2,555	242	0	434	2,385	71
GERMANY, WEST	95	2,187	828	0	137	3,073	54
GREECE	0	313	19	0	49	278	28
IRELAND	0	41	85	0	0	132	0
ITALY	36	2,215	231	0	437	2,003	77
NETHERLANDS	34	1,223	361	(*)	895	859	175
NORWAY	443	129	77	382	25	219	7
PORTUGAL	0	157	20	0	(*)	188	17
SPAIN	29	983	68	0	33	983	9
SWEDEN	0	45	312	0	53	583	28
SWITZERLAND	0	84	196	0	2	308	13
TURKEY	57	219	78	0	4	291	2
UNITED KINGDOM	1,613	1,157	286	796	272	1,930	51
YUGOSLAVIA	86	236	23	0	17	306	0
OTHER	0	0	21	0	0	21	3
TOTAL	2,482	12,809	3,362	1,200	2,736	15,037	630
EASTERN EUROPE AND U.S.S.R.							
BULGARIA	5	[c]270	[c]38	0	[c]2	[c]311	0
CZECHOSLOVAKIA	2	377	20	0	7	392	2
GERMANY, EAST	2	425	4	0	44	386	1
HUNGARY	56	193	43	0	13	279	6
POLAND	7	333	64	0	32	372	2
ROMANIA	266	285	(*)	0	152	400	1
U.S.S.R.	11,793	137	[c]15	2,603	[c]764	8,578	101
OTHER	44	0	(*)	0	1	44	0
TOTAL	12,176	2,020	184	2,603	1,015	10,762	114

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Table 14. WORLD PETROLEUM SUPPLY AND DISPOSITION, 1979 (Continued)

(Thousand Barrels per Day)

REGION AND COUNTRY	PRIMARY SUPPLY			DISPOSITION			
	Crude Oil[a] Production	Crude Oil Imports	Refined Petroleum Product Imports	Crude Oil Exports	Refined Petroleum Product Exports	Apparent Consumption (Including Bunkers)	Bunkers
MIDDLE EAST							
BAHRAIN	50	200	2	0	218	27	15
IRAN	3,178	0	1	2,407	141	532	78
IRAQ	3,487	0	31	3,275	42	191	2
ISRAEL	31	162	4	0	16	155	6
KUWAIT	2,625	0	0	2,081	294	154	46
OMAN	295	0	23	295	0	23	2
QATAR	518	0	(*)	495	0	9	0
SAUDI ARABIA	9,835	0	9	8,818	429	415	113
SYRIA	166	44	30	138	7	99	0
UNITED ARAB EMIRATES	1,861	0	38	1,802	(*)	52	2
OTHER	0	125	20	0	25	117	11
TOTAL	22,045	531	158	19,311	1,173	1,774	274
AFRICA							
ALGERIA	1,294	7	15	1,082	71	104	3
ANGOLA	147	0	4	130	5	19	3
EGYPT	542	0	16	267	33	226	17
GABON	203	0	5	165	14	26	2
KENYA	0	49	9	0	24	42	7
LIBYA	2,132	0	47	1,979	85	85	2
MOROCCO	1	91	6	0	7	90	6
NIGERIA	2,302	0	91	2,210	24	161	1
SOUTH AFRICA	0	260	3	260	2	290	52
TUNISIA	100	34	15	111	0	47	3
OTHER	112	196	158	118	44	314	38
TOTAL	6,833	637	389	6,321	308	1,404	133
FAR EAST AND OCEANIA							
AUSTRALIA	501	177	70	6	66	614	42
BRUNEI	269	0	1	201	0	3	0
CHINA	2,122	0	1	[c]190	[c]0	1,851	0
HONG KONG	0	0	127	0	4	123	28
INDIA	245	330	107	0	2	661	14
INDONESIA	1,631	52	39	1,233	108	367	10
JAPAN	8	4,834	770	0	16	5,480	192
KOREA, SOUTH	0	506	10	0	2	525	4
MALAYSIA	283	88	37	103	4	134	3
NEW ZEALAND	9	37	28	0	7	83	10
PAKISTAN	10	73	29	0	18	94	6
PHILIPPINES	26	183	40	0	1	240	3
SINGAPORE	0	569	95	1	438	380	82
TAIWAN	8	170	41	0	18	359	5
THAILAND	19	172	50	(*)	1	227	6
OTHER	30	116	98	0	16	219	9
TOTAL	5,162	7,308	1,545	1,735	702	11,361	413
WORLD TOTAL	66,164	33,604	7,981	34,102	8,427	65,110	2,424

[a]Data include natural gas plant liquids for the following countries: Canada, Mexico, United States, Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Peru, Trinidad and Tobago, Venezuela, Austria, France, Italy, Netherlands, Norway, Spain, United Kingdom, Yugoslavia, Czechoslovakia, Hungary, Poland, Romania, U.S.S.R., Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, Algeria, Egypt, Libya, Australia, Brunei, Indonesia, Japan, Malaysia, Pakistan, New Zealand, and Taiwan.

[b]Data represent apparent consumption which includes inland consumption, refinery fuel and loss, and bunkering. Apparent consumption is either an actual figure or is derived from the components of refined product output, plus imports, minus exports with no allowance for stock changes. Also includes, where available, liquefied petroleum gases sold directly for fuel and chemical uses from natural gas processing plants.

[c]Estimated

*Denotes less than one-half the unit of measure.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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Table 15. WORLD OUTPUT OF REFINED PETROLEUM PRODUCTS, 1979

(Thousand Barrels per Day)

REGION AND COUNTRY	GASOLINE		KEROSENE AND JET FUEL							
	Motor Gasoline	Total (Including Aviation Gasoline)	Jet Fuel (As Reported)	Total	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (Including Grease)	Other[a]	Refinery Fuel and Loss[b]	Total Output of Refined Petroleum Products
NORTH AMERICA										
CANADA	681	686	83	115	540	311	16	191	92	1,950
MEXICO	282	284	25	65	215	237	8	143	29	982
UNITED STATES	6,837	6,871	1,012	1,194	3,152	1,687	194	2,137	(c)	d15,236
TOTAL	7,800	7,841	1,120	1,375	3,908	2,235	218	2,471	120	18,168
CENTRAL AND SOUTH AMERICA										
ARGENTINA	105	105	13	25	137	156	6	50	15	495
BAHAMA ISLANDS	1	1	10	10	29	70	(*)	32	4	144
BRAZIL	147	147	48	57	473	225	9	63	26	1,000
CHILE	24	24	4	11	21	31	0	2	4	94
COLOMBIA	47	48	10	18	21	42	1	23	6	160
CUBA	20	20	0	9	22	59	3	6	6	125
ECUADOR	22	22	3	10	14	38	1	2	2	88
NETHERLANDS ANTILLES	66	71	35	37	74	347	12	21	12	573
PANAMA										
REPUBLIC	7	7	3	3	13	20	0	2	2	47
PERU	36	36	7	24	33	42	(*)	4	2	142
PUERTO RICO	76	77	3	6	34	71	6	58	22	273
TRINIDAD AND TOBAGO	41	41	7	16	32	119	2	9	8	227
VENEZUELA	148	149	30	40	153	546	9	98	15	1,010
VIRGIN ISLANDS	81	81	28	39	115	266	0	27	19	546
OTHER	50	50	12	25	56	70	(*)	20	9	231
TOTAL	871	879	213	329	1,227	2,101	48	416	152	5,154
WESTERN EUROPE										
AUSTRIA	41	41	2	3	57	81	3	21	6	212
BELGIUM AND LUXEMBOURG	117	117	33	36	244	188	2	79	30	696
DENMARK	34	34	(*)	2	76	52	0	12	12	188
FINLAND	49	49	5	5	78	72	0	3	14	221
FRANCE	447	448	96	98	905	675	29	259	128	2,543
GERMANY, WEST	501	501	28	30	946	376	26	413	247	2,539
GREECE	30	30	28	29	72	128	2	32	16	308
IRELAND	12	12	2	2	13	19	0	1	1	49
ITALY	387	389	45	113	619	834	18	243	164	2,379
NETHERLANDS	173	175	77	88	405	332	11	173	67	1,250
NORWAY	29	29	6	16	74	42	(*)	17	8	187
PORTUGAL	24	24	10	13	39	64	1	18	11	168
SPAIN	128	128	49	51	228	383	5	118	34	948
SWEDEN	60	60	3	4	116	130	1	9	21	340
SWITZERLAND	23	23	5	5	50	12	(*)	7	3	99
TURKEY	44	44	4	14	48	83	3	25	6	223
UNITED KINGDOM	375	377	117	174	520	522	26	248	133	1,999
YUGOSLAVIA	61	61	7	8	80	118	8	14	10	299
TOTAL	2,535	2,542	519	689	4,570	4,111	135	1,892	910	14,649
EASTERN EUROPE AND U.S.S.R.										
BULGARIA	42	42	0	5	72	106	3	12	35	275
CZECHOSLOVAKIA	41	41	0	10	91	169	3	27	39	379
GERMANY, EAST	76	76	0	(*)	122	162	8	28	31	427
HUNGARY	35	35	0	(*)	82	72	4	30	27	250
POLAND	78	78	0	3	106	79	10	28	30	334
ROMANIA	114	114	0	20	149	185	14	19	51	552
U.S.S.R.	1,699	1,699	0	767	2,289	2,646	201	912	812	9,326
OTHER	4	4	0	2	5	7	(*)	21	6	44
TOTAL	2,088	2,088	0	808	2,915	3,426	243	1,076	1,030	11,587

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Table 15. WORLD OUTPUT OF REFINED PETROLEUM PRODUCTS, 1979 (Continued)

(Thousand Barrels per Day)

REGION AND COUNTRY	GASOLINE		KEROSENE AND JET FUEL							
	Motor Gasoline	Total (Including Aviation Gasoline)	Jet Fuel (As Reported)	Total	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (Including Greases)	Other[a]	Refinery Fuel and Loss[b]	Total Output of Refined Petroleum Products
MIDDLE EAST										
BAHRAIN	25	25	25	27	55	85	1	40	10	244
IRAN	79	85	30	115	143	276	2	40	11	672
IRAQ	30	30	7	25	46	51	1	30	20	202
ISRAEL	19	23	0	17	31	67	9	10	10	166
KUWAIT	86	86	19	52	72	167	0	44	27	448
SAUDI ARABIA	58	58	1	28	93	264	0	374	18	835
SYRIA	13	13	8	8	19	29	0	5	2	76
OTHER	27	29	10	20	35	46	(*)	8	9	146
TOTAL	**338**	**351**	**99**	**291**	**493**	**984**	**13**	**552**	**106**	**2,790**
AFRICA										
ALGERIA	31	31	6	12	48	35	1	28	7	160
ANGOLA	2	2	1	2	5	11	0	(*)	1	20
EGYPT	24	24	20	51	47	101	1	7	11	243
GABON	3	3	5	5	8	13	0	6	1	35
KENYA	9	9	8	9	11	16	1	8	2	56
LIBYA	12	12	12	14	31	44	0	18	5	124
MOROCCO	11	11	6	7	25	34	1	10	5	91
NIGERIA	23	23	0	13	24	28	0	1	4	94
SOUTH AFRICA	84	84	7	16	92	62	7	17	11	288
TUNISIA	4	4	3	5	9	12	0	1	2	32
ZAMBIA	3	3	2	2	6	3	0	(*)	1	15
OTHER	33	34	13	23	64	51	1	4	7	185
TOTAL	**237**	**237**	**82**	**160**	**367**	**410**	**12**	**102**	**56**	**1,344**
FAR EAST AND OCEANIA										
AUSTRALIA	242	243	38	43	143	81	10	42	41	602
CHINA	279	306	24	415	532	608	0	9	11	1,882
INDIA	35	35	24	80	188	116	8	99	30	556
INDONESIA	53	60	7	103	93	150	1	18	11	436
JAPAN	595	595	73	531	754	1,663	40	745	208	4,535
KOREA	14	14	0	2	10	5	0	0	3	34
KOREA, SOUTH	24	24	15	40	104	250	5	78	16	517
MALAYSIA	11	11	3	6	36	40	0	6	2	101
NEW ZEALAND	30	30	0	0	13	16	0	2	2	63
PAKISTAN	11	11	11	15	22	22	1	6	6	83
PHILIPPINES	40	40	6	17	45	80	0	8	10	201
SINGAPORE	48	48	86	141	171	235	12	97	18	723
TAIWAN	34	34	(*)	16	57	158	1	51	16	332
THAILAND	36	36	13	19	48	60	0	6	8	178
OTHER	10	10	19	33	22	33	0	6	4	107
TOTAL	**1,462**	**1,497**	**319**	**1,461**	**2,238**	**3,516**	**79**	**1,172**	**388**	**10,350**
WORLD TOTAL	**15,330**	**15,435**	**2,354**	**5,113**	**15,718**	**16,782**	**747**	**7,482**	**2,761**	**64,041**

[a]Includes other finished petroleum products and unfinished oils requiring further processing such as asphalt, liquefied petroleum gases, naphtha, paraffin wax, petrochemical feedstocks, petroleum coke, unfinished oils, white spirit, and miscellaneous products.

[b]Fuels produced and subsequently consumed in refineries are included with refinery fuels rather than particular products.

[c]Refinery product output categories for the United States include fuels produced that are subsequently consumed as refinery fuel.

[d]Includes a refinery gain of 527 thousand barrels per day.

*Denotes less than one-half the unit of measure.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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Table 16. WORLD IMPORTS OF REFINED PETROLEUM PRODUCTS, 1979

(Thousand Barrels per Day)

REGION AND COUNTRY	GASOLINE		KEROSENE AND JET FUEL						
	Motor Gasoline	Total (Including Aviation Gasoline)	Jet Fuel (As Reported)	Total	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (Including Greases)	Other[a]	Total Imports of Refined Petroleum Products
NORTH AMERICA									
UNITED STATES	181	181	78	87	197	1,151	9	312	1,937
OTHER	1	2	3	3	4	29	5	11	54
TOTAL	**182**	**183**	**81**	**90**	**201**	**1,180**	**14**	**323**	**1,991**
CENTRAL AND SOUTH AMERICA									
ARGENTINA	7	7	0	4	17	0	(*)	14	42
CUBA	5	5	0	0	15	15	2	0	37
NETHERLANDS ANTILLES	6	6	4	4	4	26	1	5	46
PANAMA REPUBLIC	(*)	(*)	0	0	22	28	(*)	1	52
OTHER	50	55	7	11	34	54	9	32	195
TOTAL	**68**	**74**	**12**	**19**	**92**	**122**	**12**	**52**	**372**
WESTERN EUROPE									
AUSTRIA	16	16	(*)	(*)	4	11	2	2	35
BELGIUM AND LUXEMBOURG	29	29	1	2	88	86	10	22	236
DENMARK	18	18	20	21	73	57	10	7	186
FRANCE	13	13	1	1	47	77	3	101	242
GERMANY, WEST	71	72	40	42	393	82	4	235	828
ITALY	3	3	1	3	13	149	2	60	231
NETHERLANDS	13	13	9	13	66	69	5	195	361
NORWAY	10	10	3	9	22	3	1	31	77
SPAIN	8	8	2	6	6	9	1	38	68
SWEDEN	36	37	7	13	89	141	1	32	312
SWITZERLAND	38	38	9	10	112	6	1	28	196
TURKEY	1	1	0	0	38	26	2	12	78
UNITED KINGDOM	50	51	10	13	21	101	8	92	286
OTHER	15	16	12	16	62	100	6	27	227
TOTAL	**321**	**324**	**114**	**149**	**1,033**	**917**	**57**	**882**	**3,362**
EASTERN EUROPE AND U.S.S.R.									
BULGARIA	(*)	(*)	0	0	12	25	1	1	38
POLAND	11	11	(*)	1	27	5	0	19	64
OTHER	29	29	(*)	4	34	10	1	3	82
TOTAL	**40**	**40**	**(*)**	**6**	**74**	**40**	**2**	**22**	**184**
MIDDLE EAST									
UNITED ARAB EMIRATES	6	6	7	7	25	0	0	0	38
OTHER	20	20	9	13	32	43	6	5	120
TOTAL	**26**	**26**	**15**	**19**	**58**	**43**	**6**	**5**	**158**
AFRICA									
LIBYA	6	6	(*)	3	9	4	1	24	47
NIGERIA	35	35	10	11	16	0	2	28	91
OTHER	20	20	9	13	32	43	6	5	120
TOTAL	**73**	**85**	**41**	**59**	**105**	**34**	**14**	**72**	**389**
FAR EAST AND OCEANIA									
AUSTRALIA	12	12	1	1	11	42	1	2	70
HONG KONG	4	4	13	18	26	72	2	5	127
INDIA	0	0	0	32	41	14	1	19	107
INDONESIA	4	4	0	17	6	4	2	8	39
JAPAN	0	0	0	1	37	131	2	599	770
MALAYSIA	5	6	(*)	1	13	9	3	6	37
PHILIPPINES	1	2	(*)	(*)	31	0	(*)	7	40
SINGAPORE	(*)	1	(*)	1	6	62	16	9	95
TAIWAN	0	0	0	0	32	0	1	8	41
THAILAND	4	4	2	2	31	8	1	4	50
OTHER	37	38	14	34	62	26	5	4	169
TOTAL	**68**	**71**	**29**	**108**	**295**	**368**	**33**	**669**	**1,545**
WORLD TOTAL	**778**	**803**	**292**	**450**	**1,858**	**2,704**	**138**	**2,025**	**7,961**

[a]Includes other finished petroleum products and unfinished oils requiring further processing such as asphalt, liquefied petroleum gases, naphtha, paraffin wax, petrochemical feedstocks, petroleum coke, unfinished oils, white spirit, and miscellaneous products.

*Denotes less than one-half the unit of measure.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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WORLD IMPORTS OF REFINED PETROLEUM PRODUCTS, 1979
(Thousand Barrels per Day)

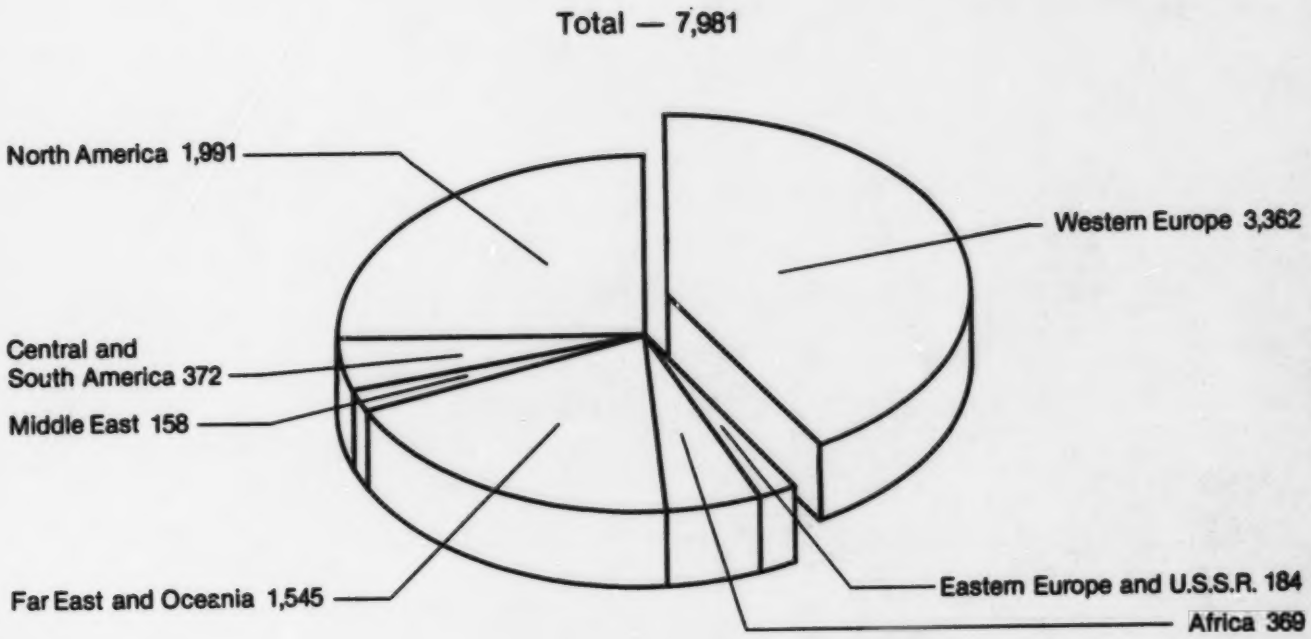

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Table 17. WORLD EXPORTS AND BUNKERS OF REFINED PETROLEUM PRODUCTS, 1979 (Thousand Barrels per Day)

REGION AND COUNTRY	GASOLINE		KEROSENE AND JET FUEL							Bunkers All Flags	
	Motor Gasoline	Total (Including Aviation Gasoline)	Jet Fuel (As Reported)	Total	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (Including Greases)	Other[a]	Total Exports of Refined Products	Residual Fuel Oil[b]	Distillate Fuel Oil and Other Products
NORTH AMERICA											
CANADA	14	14	3	3	36	48	(*)	12	113	34	21
MEXICO	0	0	0	0	2	26	0	39	68	0	1
UNITED STATES	(*)	1	1	1	3	9	23	200	236	424	193
OTHER	0	0	0	0	0	0	0	0	0	3	0
TOTAL	**15**	**15**	**4**	**4**	**42**	**82**	**24**	**251**	**417**	**462**	**215**
CENTRAL AND SOUTH AMERICA											
BAHAMA ISLANDS	0	0	9	9	26	54	0	30	119	10	1
NETHERLANDS ANTILLES	69	69	39	40	69	315	12	16	522	38	5
PUERTO RICO	38	38	1	2	22	5	6	19	92	3	1
TRINIDAD AND TOBAGO	16	16	5	14	26	106	2	7	171	7	3
VENEZUELA	31	31	8	9	52	510	5	11	618	18	2
VIRGIN ISLANDS	76	76	17	24	98	232	0	1	431	17	1
OTHER	17	19	4	4	15	79	(*)	7	123	39	39
TOTAL	**247**	**249**	**84**	**102**	**307**	**1,300**	**25**	**93**	**2,076**	**131**	**51**
WESTERN EUROPE											
BELGIUM AND LUXEMBOURG	59	59	2	31	73	82	7	42	294	58	0
DENMARK	13	13	1	2	30	8	1	3	56	6	15
FRANCE	48	48	42	44	107	160	15	60	434	48	25
GERMANY, WEST	18	18	4	4	18	30	8	59	137	40	13
GREECE	6	6	4	4	9	27	1	2	49	18	10
ITALY	53	53	106	146	122	84	9	22	437	45	32
NETHERLANDS	105	105	68	73	295	274	12	137	895	134	42
SWEDEN	10	10	0	1	12	27	1	3	53	28	0
UNITED KINGDOM	1	2	12	15	102	66	13	72	272	32	18
OTHER	30	30	4	5	24	25	3	20	109	53	13
TOTAL	**344**	**345**	**243**	**325**	**793**	**781**	**70**	**421**	**2,736**	**462**	**168**
EASTERN EUROPE AND U.S.S.R.											
ROMANIA	55	55	0	0	41	47	7	1	[c]152	1	0
U.S.S.R.	164	164	0	58	358	164	6	14	[c]764	14	88
OTHER	22	22	0	0	43	23	1	10	99	9	1
TOTAL	**242**	**242**	**0**	**58**	**442**	**236**	**14**	**25**	[c]**1,015**	**25**	**89**
MIDDLE EAST											
BAHRAIN	24	24	24	26	51	83	(*)	35	218	6	9
IRAN	8	14	8	10	1	93	(*)	23	141	77	1
KUWAIT	69	69	39	39	64	83	0	39	294	44	2
SAUDI ARABIA	10	10	0	21	29	72	0	298	429	111	2
OTHER	10	10	2	4	22	34	(*)	19	90	22	0
TOTAL	**121**	**126**	**73**	**100**	**166**	**364**	**1**	**415**	**1,173**	**260**	**14**
AFRICA											
ALGERIA	9	9	0	5	10	33	0	14	71	1	2
LIBYA	0	0	7	7	9	30	0	38	85	1	1
OTHER	11	11	19	21	28	75	2	15	153	67	60
TOTAL	**20**	**21**	**26**	**34**	**48**	**138**	**2**	**67**	**308**	**69**	**64**
FAR EAST AND OCEANIA											
AUSTRALIA	6	6	5	7	15	4	4	30	66	32	10
INDONESIA	(*)	(*)	0	(*)	1	106	0	0	108	5	6
SINGAPORE	37	38	47	65	83	156	10	84	438	60	22
OTHER	3	3	17	19	7	40	6	15	90	180	100
TOTAL	**47**	**48**	**69**	**91**	**105**	**306**	**21**	**130**	**702**	**276**	**137**
WORLD TOTAL	**1,034**	**1,046**	**499**	**713**	**1,903**	**3,209**	**163**	**1,402**	**8,427**	**1,685**	**739**

[a]Includes other finished petroleum products and unfinished oils requiring further processing such as asphalt, liquefied petroleum gases, naphtha, paraffin wax, petrochemical feedstocks, petroleum coke, unfinished oils, white spirit, and miscellaneous products.

[b]Detailed breakout of bunkers between residual and other products is not available in some instances. In those cases, the total bunkers are listed in the "Residual Fuel Oil" column with "NA" in the "Distillate Fuel Oil and Other Products" column.

[c]Estimated.

*Denotes less than one-half the unit of measure.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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WORLD EXPORTS OF REFINED PETROLEUM PRODUCTS, 1979
(Thousand Barrels per Day)

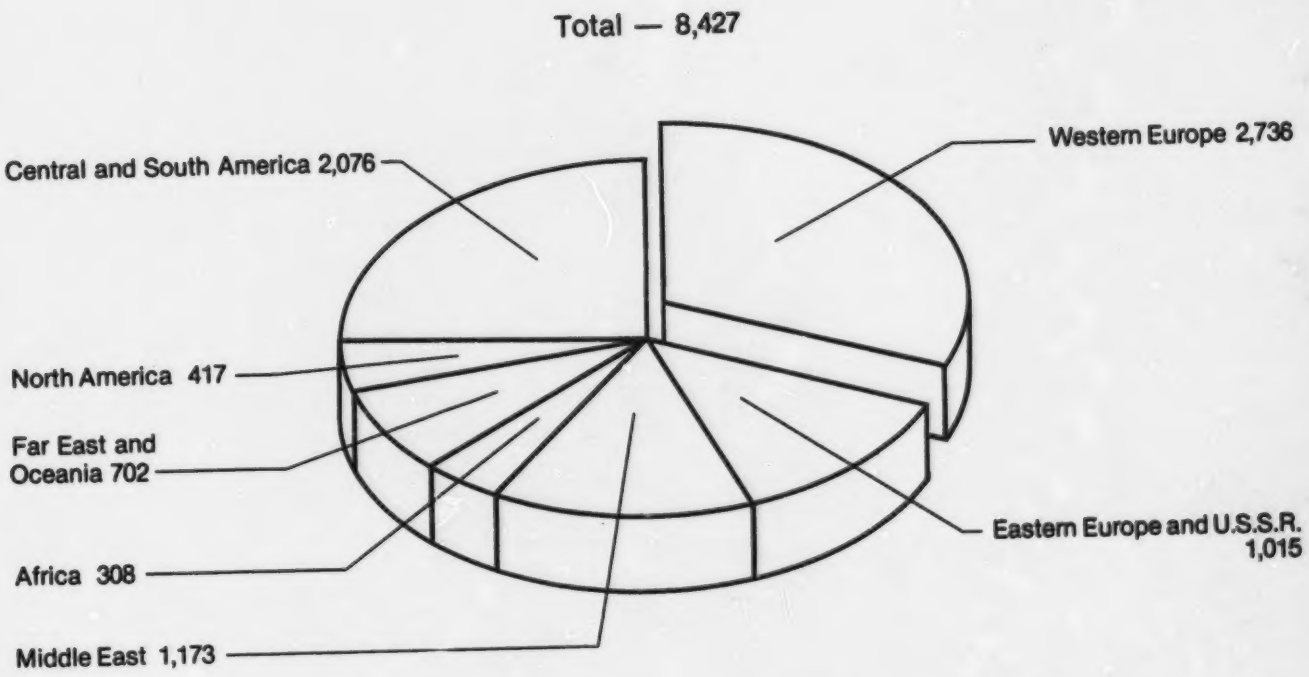

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Table 18. WORLD APPARENT CONSUMPTION OF REFINED PETROLEUM PRODUCTS, 1979[a] (Thousand Barrels per Day)

Region and Country	Gasoline (total including motor and aviation)	Kerosene and Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (including grease)	Other Refined Products[b]	Refinery Fuel and Loss	Total Apparent Consumption
NORTH AMERICA								
CANADA	664	109	499	275	18	201	92	1,857
MEXICO	276	61	203	222	10	103	29	904
UNITED STATES	7,073	1,264	3,311	2,826	180	3,859	(c)	[d]18,513
OTHER	1	2	1	1	(c)	(c)	0	6
TOTAL	8,013	1,436	4,014	3,324	208	4,163	120	21,280
CENTRAL AND SOUTH AMERICA								
ARGENTINA	121	29	154	148	6	58	15	532
BAHAMA ISLANDS	3	1	6	25	(c)	2	4	41
BRAZIL	307	14	301	332	13	180	26	1,175
CHILE	25	11	22	29	(c)	15	4	106
COLOMBIA	77	18	21	17	1	23	6	163
CUBA	25	9	38	73	4	6	6	162
ECUADOR	26	11	16	12	1	2	2	69
NETHERLANDS ANTILLES	7	1	8	57	1	10	12	96
PANAMA REPUBLIC	6	3	32	45	(c)	0	2	88
PERU	27	24	29	38	(c)	5	2	126
PUERTO RICO	44	8	12	68	1	47	22	202
TRINIDAD AND TOBAGO	25	2	6	14	1	2	8	58
VENEZUELA	133	19	59	30	3	20	15	279
VIRGIN ISLANDS	5	14	17	37	(c)	28	19	121
OTHER	54	22	73	91	2	21	11	277
TOTAL	885	188	796	1,017	34	420	152	3,492
WESTERN EUROPE								
AUSTRIA	57	2	61	91	4	21	6	242
BELGIUM AND LUXEMBOURG	87	7	259	191	5	59	30	638
DENMARK	38	21	119	101	9	17	12	318
FINLAND	38	5	102	92	2	27	14	280
FRANCE	413	73	827	575	19	351	128	2,385
GERMANY, WEST	543	56	1,295	408	23	502	247	3,073
GREECE	24	28	66	111	(c)	32	16	278
IRELAND	23	11	30	52	1	12	1	132
ITALY	283	55	504	669	12	316	164	2,003
NETHERLANDS	118	32	174	258	5	205	67	859
NORWAY	33	19	74	39	3	44	8	219
PORTUGAL	24	13	42	67	2	29	11	188
SPAIN	134	55	230	381	5	143	34	983
SWEDEN	85	13	195	232	0	38	21	583
SWITZERLAND	60	31	161	18	1	34	3	308
TURKEY	44	7	85	109	5	37	6	291
UNITED KINGDOM	436	159	424	534	20	224	133	1,930
YUGOSLAVIA	49	7	81	136	8	14	10	306
OTHER	3	3	7	6	0	0	0	21
TOTAL	2,496	595	4,738	4,070	126	2,103	910	15,037

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Table 18. WORLD APPARENT CONSUMPTION OF REFINED PETROLEUM PRODUCTS, 1979[a] (Continued) (Thousand Barrels per Day)

Region and Country	Gasoline (total including motor and aviation)	Kerosene and Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Lubricants (including grease)	Other Refined Products[b]	Refinery Fuel and Loss	Total Apparent Consumption
EASTERN EUROPE AND U.S.S.R.								
BULGARIA	42	[f]5	82	131	3	12	35	311
CZECHOSLOVAKIA	43	[f]11	98	171	3	26	39	392
GERMANY, EAST	69	[f]0	103	147	8	28	31	386
HUNGARY	46	[f]0	101	78	4	25	27	279
POLAND	80	[f]5	118	79	10	46	30	372
ROMANIA	59	[f]20	107	138	7	18	51	400
U.S.S.R.	1,544	[f]712	1,934	2,481	195	899	812	8,578
OTHER	4	[f]2	5	7	(e)	21	6	44
TOTAL	**1,886**	**[f]756**	**2,547**	**3,233**	**231**	**1,073**	**1,030**	**10,762**
MIDDLE EAST								
IRAN	72	105	142	182	3	17	11	532
IRAQ	27	26	46	58	1	14	20	191
ISRAEL	18	16	22	70	9	10	10	155
KUWAIT	17	13	8	84	0	5	27	154
LEBANON	13	5	7	13	(e)	2	2	42
SAUDI ARABIA	52	7	66	192	2	77	18	415
SYRIA	21	13	35	23	(e)	5	2	99
UNITED ARAB EMIRATES	10	8	30	4	0	0	1	52
OTHER	21	18	30	35	2	12	16	134
TOTAL	**250**	**210**	**385**	**662**	**18**	**143**	**106**	**1,774**
AFRICA								
ALGERIA	24	9	40	6	3	15	7	104
EGYPT	24	40	44	88	4	14	1	226
MOROCCO	11	7	27	32	1	9	5	90
NIGERIA	58	22	34	12	2	29	4	161
SOUTH AFRICA	85	16	90	62	7	18	11	290
OTHER	97	92	191	108	9	18	19	535
TOTAL	**302**	**185**	**424**	**307**	**25**	**106**	**56**	**1,404**
FAR EAST AND OCEANIA								
AUSTRALIA	258	39	126	86	8	55	41	614
CHINA	305	410	512	603	1	10	11	1,851
HONG KONG	4	18	25	71	1	4	0	123
INDIA	35	112	229	130	9	116	30	661
INDONESIA	63	119	98	47	3	26	11	367
JAPAN	595	507	767	2,202	39	1,161	208	5,480
KOREA, SOUTH	23	40	104	253	8	81	16	525
MALAYSIA	16	7	49	49	2	8	2	134
NEW ZEALAND	41	6	21	11	0	2	2	83
PAKISTAN	12	22	38	11	1	4	6	94
PHILIPPINES	42	17	76	80	(e)	15	10	240
SINGAPORE	12	77	93	141	17	22	18	380
TAIWAN	33	16	88	146	3	58	16	359
THAILAND	40	20	78	68	1	11	8	227
OTHER	47	35	65	58	0	5	8	224
TOTAL	**1,528**	**1,448**	**2,371**	**3,956**	**94**	**1,577**	**388**	**11,361**
WORLD TOTAL	**15,360**	**4,818**	**15,274**	**16,568**	**736**	**9,586**	**2,761**	**65,113**

[a]Data represents apparent consumption which includes inland consumption, refinery fuel and loss, and bunkering. Apparent consumption is either an actual figure or is derived from the components of refined product output, plus imports, minus exports with no allowance for stock changes. Fuel produced and subsequently consumed in refineries are included with refinery fuels rather than particular products. Also includes, where available, liquefied petroleum gases sold directly for fuel and chemical uses from natural gas processing plants.

[b]Includes other finished products and unfinished oils requiring further processing. These include asphalt, coke, liquefied petroleum gases, naphthas, paraffin wax, petrochemical feed stocks, unfinished oils, white spirit, etc.

[c]Individual product categories for the United States include fuels consumed in refineries as refinery fuel.

[d]Includes a refinery gain of 527 thousand barrels per day.

[e]Denotes less than one-half the unit of measure.

[f]Partial data only. Jet fuel may also be included under gasoline.

Note: Sum of components may not equal total due to independent rounding.

Source: Refer to Appendix A.

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Table 19. OECD[a] PETROLEUM STOCKS, 1977-1980

(Million Barrels)

Year and Quarter	Canada[b]	France	Germany, West	Italy	Japan[c]	United Kingdom[d]	United States[e]	Other OECD[f]	Total OECD
					CRUDE OIL STOCKS				
1977 Q1	38	58	86	37	201	47	300	106	873
Q2	42	63	87	51	207	54	334	142	980
Q3	37	59	93	46	203	59	334	107	938
Q4	41	70	106	51	201	59	348	124	1,000
1978 Q1	38	59	100	41	215	58	364	104	979
Q2	41	63	107	41	227	65	363	129	1,036
Q3	36	53	109	45	218	57	368	126	1,012
Q4	33	58	114	42	223	62	376	122	1,030
1979 Q1	37	52	115	34	218	59	399	105	1,018
Q2	39	68	120	39	222	66	414	127	1,095
Q3	34	64	130	39	220	68	415	140	1,110
Q4	37	66	128	46	247	69	430	138	1,161
1980 Q1	37	76	131	43	241	70	453	137	1,188
Q2	42	77	136	44	265	78	473	146	1,261
Q3	45	76	141	51	277	78	469	152	1,291
Q4	43	71	152	39	277	77	486	159	1,284
					PRODUCT STOCKS				
1977 Q1	101	158	112	99	97	87	674	267	1,595
Q2	112	143	111	111	122	90	737	286	1,712
Q3	120	173	120	118	142	95	849	324	1,941
Q4	120	171	120	108	138	88	843	320	1,908
1978 Q1	105	141	107	92	105	93	681	268	1,592
Q2	103	129	101	99	123	89	701	283	1,628
Q3	109	165	112	111	139	97	780	335	1,848
Q4	103	148	115	105	145	85	785	318	1,802
1979 Q1	92	136	107	99	105	82	629	290	1,540
Q2	97	135	115	104	113	85	676	309	1,634
Q3	107	169	129	121	153	95	767	373	1,914
Q4	108	165	134	111	150	94	779	384	1,925
1980 Q1	110	157	164	103	129	93	758	383	1,897
Q2	115	153	174	114	146	96	780	395	1,973
Q3	120	188	163	134	164	95	828	434	2,126
Q4	114	178	170	128	141	92	789	412	2,024
					TOTAL PETROLEUM STOCKS[g]				
1977 Q1	147	216	208	139	350	150	1,087	414	2,711
Q2	164	206	206	165	386	158	1,195	469	2,949
Q3	169	232	221	166	403	168	1,304	452	3,115
Q4	170	241	236	162	399	147	1,312	485	3,152
1978 Q1	150	200	216	137	379	158	1,168	418	2,826
Q2	154	192	218	144	407	147	1,185	460	2,907
Q3	159	219	231	160	410	162	1,263	461	3,065
Q4	148	214	239	153	422	147	1,278	487	3,089
1979 Q1	139	189	233	137	378	141	1,142	439	2,797
Q2	148	204	247	148	391	161	1,210	470	2,974
Q3	155	234	270	166	440	164	1,309	552	3,289
Q4	156	231	273	163	457	163	1,341	574	3,358
1980 Q1	156	233	299	152	427	163	1,342	535	3,307
Q2	171	239	313	165	471	174	1,402	557	3,492
Q3	183	264	306	192	508	173	1,447	617	3,690
Q4	171	254	323	173	481	169	1,395	587	3,553

[a]Organization for Economic Cooperation and Development. The members of OECD are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

[b]Crude oil stocks for Canada include pentanes plus and condensates but exclude pipeline fill.

[c]Total petroleum stocks for Japan include government-owned reserves.

[d]Crude oil stocks for the United Kingdom include unfinished oils beginning in 1978.

[e]Stocks for the United States include data for the 50 States and District of Columbia. Data include lease condensate, pipeline and tank farm stocks, stocks held at refineries, bulk terminals, and the Strategic Petroleum Reserve. Also, includes liquefied gases in product oil stocks.

[f]Includes OECD member nations not shown above.

[g]Includes natural gas liquids and unfinished oils in addition to crude oil and product stocks unless otherwise noted.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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OECD PETROLEUM STOCKS, 1977-1980
(Million Barrels)

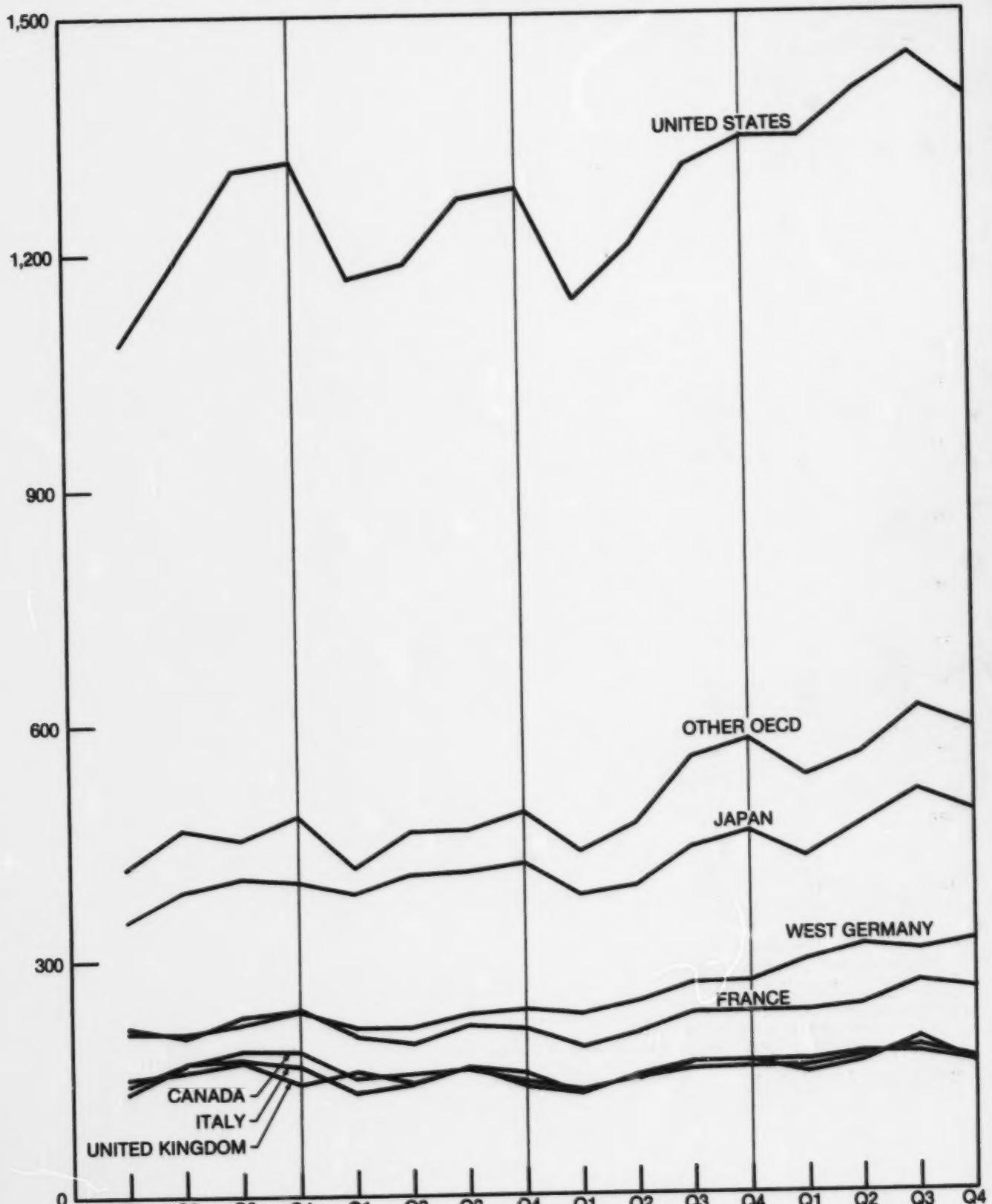

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Table 20. INTERNATIONAL CRUDE OIL FLOW, 1979

(Thousand Barrels per Day)

EXPORTING COUNTRY OR REGION	IMPORTING AREA											
	North America			Central America		Western Europe		Eastern Europe	Middle East[a] and Africa	Far East and Oceania		Total
	United States											
	East and Gulf Coasts	West Coast and Other	Canada	Caribbean Area	Other	Atlantic Ocean and North Sea	Mediterranean Sea			Japan	Other	
NORTH AMERICA												
CANADA	11	261	—	—	—	—	—	—	—	—	—	272
MEXICO	437	—	—	6	3	41	—	—	—	—	—	487
UNITED STATES	—	—	72	[b]163	—	—	—	—	—	—	—	235
CENTRAL AND SOUTH AMERICA												
ECUADOR	30	—	2	19	40	—	—	—	—	—	—	91
PERU	35	6	—	1	3	—	—	—	—	—	—	45
TRINIDAD	123	—	3	—	—	—	—	—	—	—	—	126
VENEZUELA	279	14	211	576	166	269	39	—	20	5	—	1,579
OTHER	1	—	–	—	—	10	—	—	—	—	—	11
WESTERN EUROPE												
NETHERLANDS	7	—	—	—	—	—	—	—	—	—	—	7
NORWAY	75	—	—	—	—	132	—	—	—	—	—	207
UNITED KINGDOM	196	1	2	1	—	533	1	6	—	—	—	740
U.S.S.R.	—	—	—	120	—	370	335	1,652	30	1	92	2,600
MIDDLE EAST												
VIA SUEZ CANAL AND SUMED PIPELINE	37	—	—	—	—	402	1,181	—	48	—	—	1,668
VIA EASTERN MEDITERRANEAN	11	—	15	—	—	57	682	21	56	—	—	842
VIA CAPE OF GOOD HOPE	1,966	—	275	406	996	3,600	1,336	116	—	—	—	8,695
OTHER	—	82	—	—	—	—	86	—	533	3,576	2,174	6,451
TOTAL	2,014	82	290	406	996	4,059	3,285	137	637	3,576	2,174	17,656
AFRICA												
NORTH	1,296	9	25	224	25	692	847	85	11	10	12	3,236
WEST	1,187	3	—	150	240	831	198	4	39	—	—	2,652
FAR EAST AND OCEANIA	54	398	—	23	14	11	17	—	—	1,120	244	1,881
WORLD TOTAL	5,746	773	605	1,689	1,487	6,948	4,722	1,884	737	4,712	2,522	31,825

[a]Shipments to Jordan, Lebanon, and Syria only.
[b]Includes shipments to Puerto Rico and the Virgin Islands.
—Indicates data not applicable.
Note: Data do not include transhipments.

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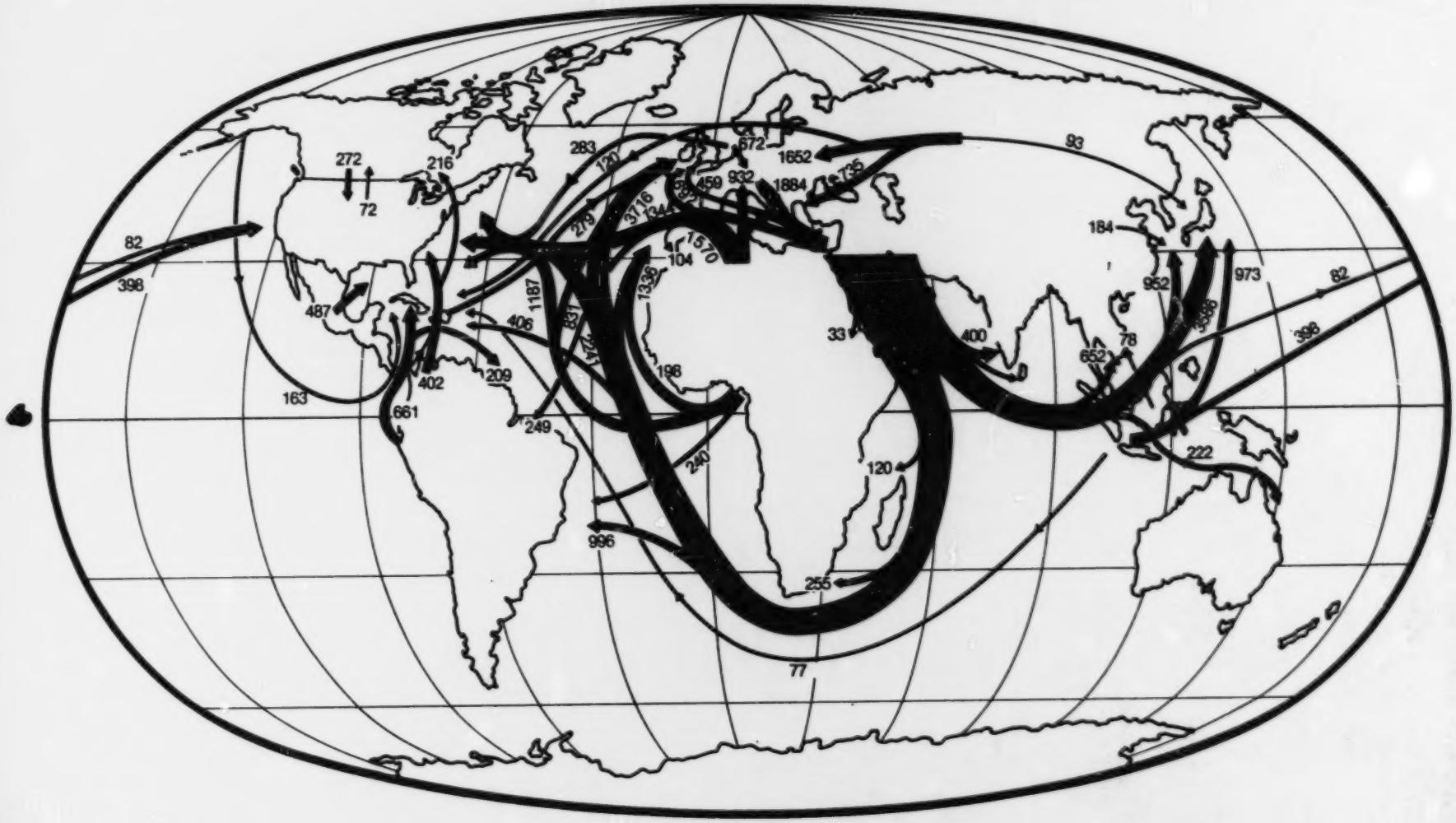
INTERNATIONAL CRUDE OIL FLOW, 1979

(Thousand Barrels per Day)



Arrows Indicate Origin and Destination
But Not Necessarily Specific Routes

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Energy Information Administration

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Table 21. WORLD REFINING CAPACITY, JANUARY 1, 1981

(Thousand Barrels per Day)

COUNTRY AND AREA	NUMBER OF REFINERIES	CRUDE OIL	CATALYTIC CRACKING	THERMAL CRACKING	REFORMING
NORTH AMERICA					
CANADA	33	2,166	458	31	387
MEXICO	9	1,394	297	78	82
UNITED STATES	297	18,400	4,775	338	3,690
TOTAL	339	21,960	5,530	447	4,159
CENTRAL AND SOUTH AMERICA					
ARGENTINA	12	679	98	53	37
BAHAMA ISLANDS	1	500	NA	NA	NA
BRAZIL	13	1,402	218	2	21
NETHERLANDS ANTILLES	2	782	42	283	15
TRINIDAD AND TOBAGO	2	456	25	NA	27
VENEZUELA	9	1,349	72	75	19
VIRGIN ISLANDS	1	728	NA	NA	70
OTHER	34	1,262	202	89	144
TOTAL	74	7,157	654	501	334
WESTERN EUROPE					
BELGIUM	8	1,056	85	NA	132
FINLAND	2	336	95	12	55
FRANCE	22	3,342	204	67	433
GERMANY, WEST	31	3,021	182	382	400
GREECE	4	428	18	11	30
ITALY	32	4,092	285	110	409
NETHERLANDS	8	1,827	75	113	212
PORTUGAL	2	341	NA	11	52
SPAIN	10	1,464	NA	13	192
SWEDEN	6	451	NA	33	58
TURKEY	4	356	41	NA	30
UNITED KINGDOM	19	2,629	194	125	434
OTHER	18	1,203	21	171	172
TOTAL	166	20,545	1,114	1,049	2,607
EASTERN EUROPE AND U.S.S.R.					
U.S.S.R.	32	11,400	NA	NA	NA
OTHER[a]	38	2,827	NA	NA	NA
TOTAL	70	14,227	NA	NA	NA
MIDDLE EAST					
KUWAIT	5	645	NA	NA	22
SAUDI ARABIA	3	487	NA	3	45
OTHER	25	2,258	97	182	183
TOTAL	33	3,390	97	184	250
AFRICA					
SOUTH AFRICA	4	469	85	64	68
OTHER	37	1,229	32	7	127
TOTAL	41	1,698	117	71	195
FAR EAST AND OCEANIA					
AUSTRALIA	12	743	161	NA	161
CHINA	20	1,810	NA	NA	NA
INDIA	9	557	55	55	15
INDONESIA	9	445	13	33	27
JAPAN	45	5,454	342	40	542
SOUTH KOREA	6	607	NA	NA	26
SINGAPORE	5	1,069	NA	48	39
TAIWAN	2	515	9	NA	50
OTHER	21	1,165	32	NA	120
TOTAL	129	12,365	611	207	979
WORLD TOTAL	852	81,341	8,122	2,460	8,524

[a]Includes Albania, Bulgaria, Cuba, Czechoslovakia, East Germany, Hungary, Mongolia, North Korea, Poland, Romania, and Vietnam.
NA = Not available.
Source: *Oil and Gas Journal*, December 29, 1980, pp. 78-79.

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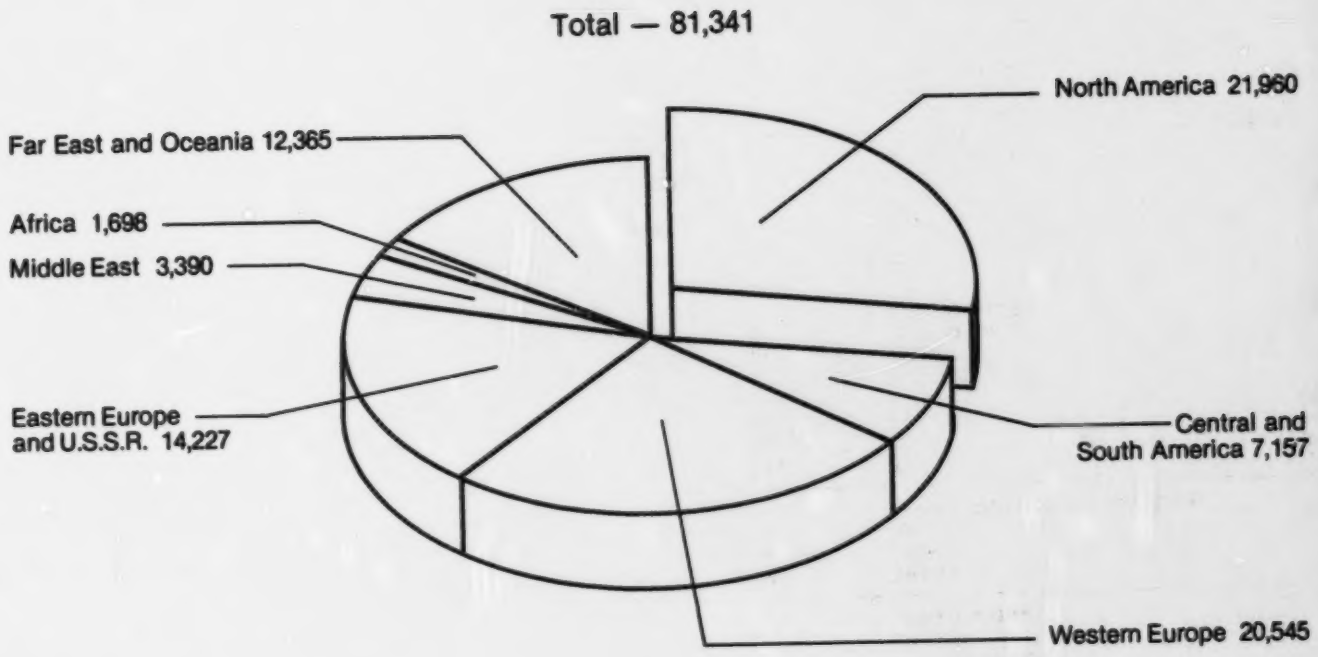
WORLD CRUDE OIL REFINING CAPACITY, JANUARY 1, 1981

(Thousand Barrels per Day)



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International Petroleum Prices

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Table 22. CRUDE OIL SELLING PRICES

(U.S. Dollars per Barrel, January 1)

Area Country Crude Type (API Gravity)	1973	1974	1975	1976	1977	1978	1979	1980	1981
NORTH AMERICA									
Mexico									
Isthmus (34)	(a)	(a)	(a)	12.10	13.35	13.40	14.10	32.00	38.50
Canada									
Canadian Heavy (22)[b]	(a)	(a)	(a)	(a)	(a)	(a)	14.25	26.60	34.09
CENTRAL AND SOUTH AMERICA									
Venezuela									
Tia Juana (26)	E2.63	E10.13	E10.59	11.12	12.72	12.82	13.36	25.20	32.88
Ecuador									
Oriente (30)	E2.14	E11.29	11.45	11.45	13.00	12.65	13.03	E33.50	40.06
WESTERN EUROPE									
United Kingdom									
Forties (37)	(a)	(a)	(a)	(a)	14.10	13.65	15.50	29.75	39.25
Norway									
Ekofisk (40)	(a)	(a)	(a)	(a)	14.33	14.20	15.10	32.50	40.00
MIDDLE EAST									
Saudi Arabia									
Arabian Light (34)	E2.41	E10.84	10.46	11.51	12.09	12.70	13.34	26.00	32.00
Iran									
Iranian Light (34)	E2.40	E11.04	10.67	11.62	12.81	12.81	13.45	30.37	37.00
Kuwait									
Kuwait Blend (31)	E2.31	E10.74	10.37	11.30	12.37	12.27	12.83	27.50	35.50
Abu Dhabi									
Murban (39)	E2.47	E11.75	10.87	11.92	12.50	13.26	14.10	29.56	36.56
Iraq									
Basrah Light (35)	E2.38	E10.85	10.48	11.53	12.58	12.58	13.21	27.96	35.96
AFRICA									
Algeria									
Saharan (44)	E3.30	14.00	12.00	12.85	14.30	14.25	14.81	30.00	40.00
Libya									
Es Sider (37)	E2.87	E11.98	E11.10	12.21	13.74	13.80	14.52	34.50	40.78
Nigeria									
Bonny (37)	E3.31	E13.66	E10.85	12.70	14.31	14.31	14.80	29.97	40.00
FAR EAST AND OCEANIA									
Indonesia									
Minas (34)	3.73	10.80	12.60	12.80	13.55	13.55	13.90	27.50	35.00

[a]No significant volume of exports.
[b]FOB equivalent.
E = Estimated.
Sources: Refer to Appendix A.

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
NORTH AMERICA						
CANADA, OTTAWA Dollar/U.S. Dollar		1.15			1.19	
(Price Per Gallon)						
Premium Gasoline 94/98 RON	.89	.26		1.06	.26	
Regular Gasoline 91/94 RON	.81	.25		.98	.25	
Auto Diesel Fuel	.80	.24		.93	.25	
Household Kerosene	.86	0		.97	0	
Light Heating Oil	.55	0		.66	0	
LPG	.52	0		.59	0	
(Price Per Barrel)						
Distillate Fuel Oil	21.95	0		25.42	0	
Marine Diesel Fuel[2]	36.33	x		38.87	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	14.22	0		18.90	0	
Marine Fuel Oil[2]	20.87	x		27.03	x	
MEXICO, MEXICO CITY Peso/U.S. Dollar		22.95			23.39	
(Price Per Gallon)						
Premium Gasoline 92 RON	.66	x		1.13	.48	
Regular Gasoline 81 RON	.46	x		.45	.15	
Auto Diesel Fuel	.16	x		.16	x	
Household Kerosene	.09	x		.09	x	
Light Heating Oil	x	x		x	x	
LPG	.21	x		.21	x	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	2.77	x		2.79	x	
Heavy Fuel Oil	2.42	x		2.45	x	
Marine Fuel Oil	x	x		x	x	
UNITED STATES, NATIONAL AVERAGE U.S. Dollar						
(Price Per Gallon)						
Premium Gasoline 95/98 RON[3]	1.31	.12		1.34	.12	
Regular Gasoline 90/94 RON[3]	1.22	.12		1.24	.12	
Auto Diesel Fuel	1.14	x		1.21	x	
Household Kerosene[4]	.89	x		1.07	x	
Light Heating Oil	.98	x		1.14	x	
LPG[4]	.65	x		.71	x	
(Price Per Barrel)						
Distillate Fuel Oil[4]	35.28	x		43.93	x	
Marine Diesel Oil[5]	36.00	x		39.00	x	
Medium Fuel Oil[4]	28.40	x		33.22	x	
Heavy Fuel Oil 1%S[4 6]	20.58	x		31.35	x	
Marine Fuel Oil[5]	20.50	x		30.50	x	
CENTRAL AND SOUTH AMERICA						
ARGENTINA, BUENOS AIRES[7] Peso/U.S. Dollar		1,881			1,988	
(Price Per Gallon)						
Premium Gasoline 93.5/97 RON	1.89	1.08	10%	2.63	1.59	10%
Regular Gasoline 84/85 RON	1.57	.84	10%	2.15	1.22	10%
Auto Diesel Fuel	.73	.19	10%	.78	.23	10%
Household Kerosene	1.13	.46	10%	1.58	.72	10%
Light Heating Oil	1.13	.46	10%	1.58	.72	10%
LPG	x	x	x	1.00	0	10%
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	32.87	9.52	10%
Marine Diesel Fuel	x	x	x	29.11	0	0
Medium Fuel Oil	17.32	.88	10%	25.45	1.04	10%
Heavy Fuel Oil[8]	17.32	.88	10%	25.45	1.04	10%
Marine Fuel Oil	x	x	x	20.54	0	0

Footnotes on page 62.

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
CENTRAL AND SOUTH AMERICA (Continued)						
BOLIVIA, LA PAZ[9] Peso Boliviano/U.S. Dollar		24.51			24.51	
(Price Per Gallon)						
Premium Gasoline 92 RON	.91	12.5%		.91	12.5%	
Regular Gasoline 82 RON	.76	12.5%		.76	12.5%	
Auto Diesel Fuel	.61	3%		.61	3%	
Household Kerosene	.14	12.5%		.14	12.5%	
Light Heating Oil	x	x		x	x	
LPG	.17	x		.17	x	
(Price Per Barrel)						
Distillate Fuel Oil	31.91	3%		31.91	3%	
Marine Diesel Oil	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	25.44	x		25.44	x	
Marine Fuel Oil	x	x		x	x	
BRAZIL, RIO DE JANEIRO Cruzeiro/U.S. Dollar		52.80			67.50	
(Price Per Gallon)						
Premium Gasoline 90 RON	x	x		x	x	
Regular Gasoline 82 RON	3.23	x		2.52	.99	
Auto Diesel Fuel	.97	x		.97	.20	
Household Kerosene	1.18	x		1.03	.16	
Light Heating Oil	x	x		x	x	
LPG	.50	x		.70	x	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		48.93	x	
Medium Fuel Oil	x	x		23.55	x	
Heavy Fuel Oil[10]	16.86	x		24.73	x	
Marine Fuel Oil	16.86	x		24.73	x	
CHILE, SANTIAGO Peso/U.S. Dollar		39.00			39.00	
(Price Per Gallon)						
Premium Gasoline 93 RON	2.22	20%	10%	2.00	20%	10%
Regular Gasoline 81 RON	1.74	20%	10%	1.74	20%	10%
Auto Diesel Fuel	1.57	20%	10%	1.63	20%	10%
Household Kerosene	1.30	20%	10%	1.30	20%	10%
Light Heating Oil	x	x	x	x	x	x
LPG	1.04	20%	10%	1.09	20%	10%
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Fuel[11 12]	50.87	20%	10%	x	x	x
Medium Fuel Oil	41.90	20%	10%	33.70	20%	10%
Heavy Fuel oil 2-2.5%S	35.92	20%	10%	28.64	20%	10%
Marine Fuel Oil[11]	32.73	20%	10%	x	x	x
COLUMBIA, BOGOTA Peso/U.S. Dollar		47.52			51.08	
(Price Per Gallon)						
Premium Gasoline 93 RON	.89	.61		1.03	.69	
Regular Gasoline 83 RON	.72	.50		.86	.59	
Auto Diesel Fuel	.72	.34		.86	.38	
Household Kerosene	.72	x		.86	.07	
Light Heating Oil	.44	x		.41	.05	
LPG	x	x		.42	.01	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	x	x		36.18	13.13	
Marine Fuel Oil	x	x		x	x	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
CENTRAL AND SOUTH AMERICA (Continued)						
DOMINICAN REP., SANTA DOMINGO[13] Peso/U.S. Dollar		1.00			1.00	
(Price Per Gallon)						
Premium Gasoline 95 RON	2.39	0		2.39	0	
Regular Gasoline	x	x		x	x	
Auto Diesel Fuel	.97	0		.97	0	
Household Kerosene	.79	0		.79	0	
Light Heating Oil 1%S	.97	0		.97	0	
LPG	.86	0		.86	0	
(Price Per Barrel)						
Distillate Fuel Oil	39.67	0		39.67	0	
Marine Diesel Fuel	39.67	0		39.67	0	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil 3.5%S[14]	22.82	0		22.82	0	
Marine Fuel Oil 3.5%S	22.82	0		22.82	0	
ECUADOR, QUITO[15 16] Sucre/U.S. Dollar		25.00			25.00	
(Price Per Gallon)						
Premium Gasoline 92 RON	.73	x		.80	x	
Regular Gasoline 80 RON	.19	.08		.60	x	
Auto Diesel Fuel	.30	.05		.44	x	
Household Kerosene	.13	.01		.24	x	
Light Heating Oil[17]	.16	.07		.40	x	
LPG	.47	x		.86	8%	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil 3.2-3.4%S[18]	3.56	x		11.76	x	
Marine Fuel Oil	x	x		x	x	
EL SALVADOR, SAN SALVADOR Colon/U.S. Dollar		3.28			2.50	
(Price Per Gallon)						
Premium Gasoline 95 RON	x	x	x	2.56	.26	.25 + 6%
Regular Gasoline 87 RON	x	x	x	2.49	.26	.25 + 6%
Auto Diesel Fuel	x	x	x	.52	.03	.16 + 10%
Household Kerosene	x	x	x	1.58	negl.	0
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Fuel	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil	x	x	x	x	x	x
JAMAICA, KINGSTON Dollar/U.S. Dollar		1.79			1.79	
(Price Per Gallon)						
Premium Gasoline 95 RON	2.17	.79		2.17	x	
Regular Gasoline 87 RON	2.12	.79		2.12	x	
Auto Diesel Fuel	1.35	.14		1.35	x	
Household Kerosene	1.16	0		1.18	x	
Light Heating Oil	1.31	.14		x	x	
LPG	.74	.01		.75	x	
(Price Per Barrel)						
Distillate Fuel Oil[19]	x	x		53.26	x	
Marine Diesel Oil	41.55	0		41.55	x	
Medium Fuel Oil[19]	x	x		53.26	x	
Heavy Fuel Oil[10 19]	27.97	0		38.39	x	
Marine Fuel Oil	25.15	0		36.56	x	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
CENTRAL AND SOUTH AMERICA (Continued)						
PANAMA REPUBLIC, PANAMA Balboa/U.S. Dollar		1.00			1.00	
(Price Per Gallon)						
Premium Gasoline 95 RON	2.11	.10	.41	2.17	.10	.41
Regular Gasoline 87 RON	1.98	.10	.33	2.04	.10	.33
Auto Diesel Fuel	1.22	0	.02	1.26	0	.02
Household Kerosene	1.12	0	.02	1.16	0	.02
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Fuel[20]	44.78	x	x	44.78	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil[20]	24.30	x	x	37.80	x	x
PARAGUAY, ASUNCION[21] Guarani/U.S. Dollar		126.00			126.00	
(Price Per Gallon)						
Premium Gasoline 93 RON	3.75	.28		4.51	.28	
Regular Gasoline 85 RON	3.00	.24		3.61	.24	
Auto Diesel Fuel	1.44	.05		1.74	.05	
Household Kerosene	1.80	.07		2.10	.07	
Light Heating Oil	x	x		x	x	
LPG	x	x		1.53	.41	
(Price Per Barrel)						
Distillate Fuel	46.62	1.68		68.77	2.11	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		52.52	1.70	
Heavy Fuel Oil[22]	x	x		55.52	1.70	
Marine Fuel Oil	x	x		x	x	
PERU, LIMA Sol/U.S. Dollar		288.37			347.53	
(Price Per Gallon)						
Premium Gasoline 95 RON	.90	.29		.84	x	
Regular Gasoline 84 RON	.75	.24		.69	x	
Auto Diesel Fuel	.40	.10		.37	x	
Household Kerosene	.11	0		.08	x	
Light Heating Oil	x	x		x	x	
LPG	.31	x		.33	x	
(Price Per Barrel)						
Distillate Fuel Oil	16.90	4.20		15.73	x	
Marine Diesel Oil	x	x		x	x	
Medium Fuel Oil	12.82	x		11.74	x	
Heavy Fuel Oil	11.36	3.36		10.41	x	
Marine Fuel Oil	x	x		x	x	
URUGUAY, MONTEVIDEO New Peso/U.S. Dollar		9.11			10.03	
(Price Per Gallon)						
Premium Gasoline 95 RON	3.97	1.59		4.11	1.56	
Regular Gasoline 80 RON	3.18	1.21		3.31	1.19	
Auto Diesel 1%S	1.61	.40		1.68	.39	
Household Kerosene .2%S	1.72	.26		1.78	.26	
Light Heating Oil 2%S	1.31	.24		1.37	.23	
LPG .015%S	3.29	.24		3.43	.23	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil 3%S	39.96	4.20		41.60	4.05	
Heavy Fuel Oil 4%S[23]	31.61	3.31		32.93	3.21	
Marine Fuel Oil 4%S[24]	26.28	0		27.78	0	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
CENTRAL AND SOUTH AMERICA (Continued)						
VENEZUELA, CARACAS Bolivar/U.S. Dollar		4.30			4.30	
(Price Per Gallon)						
Premium Gasoline 97 RON	.31	.13		.31	.13	
Regular Gasoline 74 RON	.13	.01		.13	.01	
Auto Diesel Fuel	.09	negl.		.09	negl.	
Household Kerosene	.11	negl.		.11	negl.	
Light Heating Oil	x	x		x	x	
LPG	.35	x		.35	x	
(Price Per Barrel)						
Distillate Fuel Oil	2.44	x		2.44	x	
Marine Diesel Fuel	2.44	x		2.44	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil 2.8%S[25]	1.68	x		1.68	x	
Marine Fuel Oil	1.68	x		1.68	x	
WESTERN EUROPE						
AUSTRIA, VIENNA Schilling/U.S. Dollar		12.49			13.99	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	2.79	.94[26] + 18% v.a.t.	0 – .07	2.65	.84 + 8%[27] + 18% v.a.t.	0 – .06
Regular Gasoline 88/89 RON	2.58	.94[26] + 18% v.a.t.	0 – .07	2.46	.84 + 8%[27] + 18% v.a.t.	0 – .06
Auto Diesel Fuel	2.67	.83[26] + 18% v.a.t.	0 – .05	2.54	.74 + 8%[27] + 18% v.a.t.	0 – .04
Household Kerosene[28]	4.16	.80 + 8% v.a.t.	0 – .03	3.92	.74 + 13% v.a.t.	0 – .04
Light Heating Oil .5%S	1.52	.14 + 8% v.a.t.	0 – .04	1.52	.14 + 13% v.a.t.	0 – .04
LPG	x	x	x	2.17	13% v.a.t.	0 – 4.7%[7]
(Price Per Barrel)						
Distillate Fuel Oil .95%S[29]	x	x	x	48.62	13% v.a.t.	0 – .62
Marine Diesel Fuel	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	13% v.a.t.	x
Heavy Fuel Oil 3.5%S[29]	29.73	8% v.a.t.	0 – .78	35.78	13% v.a.t.	0 – .66
Marine Fuel Oil	x	x	x	x	x	x
BELGIUM, BRUSSELS[30] Franc/U.S. Dollar		28.19			32.16	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	3.24	1.31 + 16% v.a.t.		3.00	1.00 + 25% v.a.t.	
Regular Gasoline 91/93 RON	3.17	1.31 + 16% v.a.t.		2.91	1.00 + 25% v.a.t.	
Auto Diesel Fuel	1.98	.38 + 16% v.a.t.		2.05	.41 + 25% v.a.t.	
Household Kerosene	1.39	.06 + 6% v.a.t.		1.34	x	
Light Heating Oil	1.31	.06 + 6% v.a.t.		1.27	16% v.a.t.	
LPG	1.85	6%		1.91	16% v.a.t.	
(Price Per Barrel)						
Distillate Fuel Oil	55.62	2.55 + 6% v.a.t.		53.84	16% v.a.t.	
Marine Diesel Fuel[31]	53.98	2.49 + 6% v.a.t.		52.25	16% v.a.t.	
Medium Fuel Oil 130-200 secs.	38.60	.51 + 6% v.a.t.		45.25	16% v.a.t.	
Heavy Fuel Oil 700 secs.	34.05	.51 + 6% v.a.t.		43.28	16% v.a.t.	
Marine Fuel Oil 3.5%S[31]	30.20	.51 + 6% v.a.t.		40.28	16% v.a.t.	
DENMARK, COPENHAGEN[32] Krone/U.S. Dollar		5.48			6.05	
(Price Per Gallon)						
Premium Gasoline 97/98 RON	3.34	1.93		3.13	1.77	
Regular Gasoline 92 RON	3.30	1.92		3.09	1.76	
Auto Diesel Fuel	1.87	.55		1.83	.55	
Household Kerosene[33]	1.80	22% v.a.t.		1.66	22% v.a.t.	
Light Heating Oil[33]	1.68	.21 + 22% v.a.t.		1.66	.23 + 22% v.a.t.	
LPG[34]	x	x		1.40	1.15	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Oil	x	x		43.41	0	
Medium Fuel Oil	44.68	8.86 + 22% v.a.t.		59.96	9.68 + 22% v.a.t.	
Heavy Fuel Oil	x	x		x	x	
Marine Fuel Oil	x	x		38.31	0	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
WESTERN EUROPE (Continued)						
FINLAND, HELSINKI[35] Markka/U.S. Dollar		3.64			4.07	
(Price Per Gallon)						
Premium Gasoline 98 RON	3.13	1.15		3.15	1.04	
Regular Gasoline 92 RON	3.01	1.15		3.03	1.04	
Auto Diesel Fuel	2.11	.68		2.18	.62	
Household Kerosene	1.64	.06		1.71	.05	
Light Heating Oil	1.26	.09		1.36	.09	
LPG	1.58	.01		1.47	.01	
(Price Per Barrel)						
Distillate Fuel Oil	49.80	3.74		53.58[36]	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil 2.7%S[37]	31.33	2.68		34.78	2.54	
Marine Fuel Oil 2.7%S	30.41	2.68		33.65	0	
FRANCE, PARIS[38] Franc/U.S. Dollar		4.12			4.63	
(Price Per Gallon)						
Premium Gasoline 98 RON	3.17	1.81		2.99	1.64	
Regular Gasoline 90/92 RON	2.97	1.70		2.82	1.54	
Auto Diesel Fuel	2.23	1.04		2.15	.95	
Household Kerosene	x	x		x	x	
Light Heating Oil	1.49	.36		1.49	.34	
LPG	x	x		x	x	
(Price Per Barrel)	x	x		55.49	13.35	
Distillate Fuel Oil	x	x		32.12	0	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	28.06	17.6%		32.95	17.6%	
Heavy Fuel Oil 4%S[39]	x	x		35.29	0	
Marine Fuel Oil	x	x		x	x	
W. GERMANY, BONN[40] Deutsche Mark/ U.S. Dollar		1.77			2.00	
(Price Per Gallon)						
Premium Gasoline 98 RON	2.57	1.24	0-6%	2.43	1.11	x
Regular Gasoline 91.5 RON	2.46	1.23	0-6%	2.33	1.10	x
Auto Diesel Fuel	2.46	1.18	0-6%	2.26	1.05	x
Household Kerosene[28]	8.56	1.11	0-6%	x	x	x
Light Heating Oil	1.33	.19	0-6%	1.29	.18	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Oil	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	32.00	1.27	0-3.5%	34.33	1.13	x
Marine Fuel Oil	x	x	x	x	x	x
GREECE, ATHENS Drachma/U.S. Dollar		43.10			47.53	
(Price Per Gallon)						
Premium Gasoline 96/98 RON	3.21	1.16	.12	2.91	1.05	.11
Regular Gasoline 90 RON	2.85	.99	.11	2.58	.91	.10
Auto Diesel Fuel	1.52	.08	.09	1.38	.07	.08
Household Kerosene	1.94	.07	0	1.76	.06	0
Light Heating Oil	x	.05	.09	x	x	x
LPG	1.40	.09	.07	1.27	.08	.06
(Price Per Barrel)						
Distillate Fuel Oil	59.79	2.01	3.62	54.23	1.83	3.28
Marine Diesel Fuel	46.40	0	0	42.08	0	0
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil 4%S[41]	32.16	1.22	0	29.16	1.11	0
Marine Fuel Oil 4%S	28.13	0	0	25.51	0	0

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
WESTERN EUROPE (Continued)						
IRELAND, DUBLIN Pound/U.S. Dollar		.4684			.5339	
(Price Per Gallon)						
Premium Gasoline 97 Ron	2.77	1.35		2.54	1.19	
Regular Gasoline 86 RON	2.73	1.34		2.50	1.19	
Auto Diesel Fuel	2.27	.84		2.10	.75	
Household Kerosene	1.72	.15		x	x	
Light Heating Oil	1.63	.15		x	x	
LPG	.76	.11		x	x	
(Price Per Barrel)						
Distillate Fuel Oil	56.60	5.19		54.05	4.56	
Marine Diesel Fuel[12]	46.78	x		47.72	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	36.59	5.10		38.85	4.48	
Marine Fuel Oil	26.88	x		37.54	x	
ITALY, ROME[42] Lira/U.S. Dollar		841.5			952.5	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	3.15	1.90	6%	3.38	2.19	6%
Regular Gasoline 86/87 RON	3.08	1.89	6%	3.28	2.17	6%
Auto Diesel Fuel	1.47	.29	3.5%	1.35	.28	3.5%
Household Kerosene	1.21	.23	6%	1.12	.21	6%
Light Heating Oil	1.30	.27	6%	1.20	.26	3.5%
LPG	2.06	.57	1.5%	1.82	.54	1.5%
(Price Per Barrel)						
Distillate Fuel Oil	35.09	5.47	6%	32.88	5.32	6%
Marine Diesel Oil	47.18	0	0	47.39	0	0
Medium Fuel Oil 3-4%S	36.66	5.56	3.5%	34.39	5.42	3.5%
Heavy Fuel Oil 3-3.4%S[43 44]	30.27	3.90	3.5%	35.98	4.85	3.5%
Marine Fuel Oil 3-4%S	25.53	0	0	35.36	0	0
LUXEMBOURG, LUXEMBOURG Franc/U.S. Dollar		28.55			31.50	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	2.54	.75 + 5% v.a.t.		2.34	.68 + 5% v.a.t.	
Regular Gasoline 91/93 RON	2.48	.75 + 5% v.a.t.		2.26	.68 + 5% v.a.t.	
Auto Diesel Fuel	1.62	.19 + 5% v.a.t.		1.57	.17 + 5% v.a.t.	
Household Kerosene	1.40	.06 + 5% v.a.t.		1.37	.05 + 5% v.a.t.	
Light Heating Oil	1.36	.06 + 5% v.a.t.		1.33	.05 + 5% v.a.t.	
LPG	x	x		1.46	5% v.a.t.	
(Price Per Barrel)						
Distillate Fuel Oil	55.55	2.51 + 5% v.a.t.		54.78	2.27 + 5% v.a.t.	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	40.45	.50 + 5% v.a.t.		46.26	.45 + 5% v.a.t.	
Heavy Fuel Oil	30.76	.53 + 5% v.a.t.		44.30	.48 + 5% v.a.t.	
Marine Fuel Oil	x	x		x	x	
NETHERLANDS, THE HAGUE[38] Guilder/U.S. Dollar		1.91			2.18	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	2.96	1.51		2.71	1.36	
Regular Gasoline 92/93 RON	2.89	1.50		2.65	1.35	
Auto Diesel Fuel	1.97	.67		1.81	.61	
Household Kerosene	1.95	.37		1.77	.33	
Light Heating Oil	1.46	.29		1.36	.27	
LPG	x	x		x	x	
(Price Per Barrel)						
Distillate Fuel Oil[45]	52.07	2.81		47.95	2.46	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil[45]	28.86	1.13		33.30	.99	
Heavy Fuel Oil 800 secs.[45]	30.33	1.19		35.00	1.04	
Marine Fuel Oil 3500 secs.	x	x		x	x	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
WESTERN EUROPE (Continued)						
NORWAY, OSLO[38] Krone/U.S. Dollar		5.00			5.00	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	2.93	1.47		2.99	1.48	
Regular Gasoline 93 RON	2.87	1.43		2.93	1.44	
Auto Diesel Fuel	1.56	.26		1.65	.29	
Household Kerosene	1.49	.26		1.57	.28	
Light Heating Oil	1.44	.25		1.52	.27	
LPG	x	x		x	x	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Oil	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	x	x		x	x	
Marine Fuel Oil	x	x		x	x	
PORTUGAL, LISBON Escudo/U.S. Dollar		49.45			53.53	
(Price Per Gallon)						
Premium Gasoline 98/99 RON	3.45	1.87	.34	3.54	2.19	.12
Regular Gasoline 85/87 RON	3.13	1.64	.33	3.25	1.97	.12
Auto Diesel Fuel	1.34	.22	.01	1.59	.34	.01
Household Kerosene	1.34	.11	.05	1.59	.26	.04
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	1.14	.01	.05
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	49.00	x	x
Marine Diesel Fuel	46.92	x	x	44.91	0	0
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil 3.5%S[10 46]	22.91	7.25	.20	25.24	9.24	.28
Marine Fuel Oil	27.03	x	x	36.04	0	0
SPAIN, MADRID[35] Peseta/U.S. Dollar		70.17			85.10	
(Price Per Gallon)						
Premium Gasoline 98 RON	3.24	1.06		3.11	1.02	
Regular Gasoline 90 RON	2.81	1.05		2.76	1.01	
Auto Diesel Fuel	1.62	.39		1.78	.34	
Household Kerosene	1.78	.11		1.89	.09	
Light Heating Oil	1.16	.03		1.36	.04	
LPG	1.17	x		1.23	.02	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel[12 47]	49.60	2.27		47.59	1.87	
Medium Fuel Oil	27.82	.09		36.04	.08	
Heavy Fuel Oil[48]	27.82	.09		36.04	.08	
Marine Fuel Oil[47]	30.03	.09		38.89	.08	
SWEDEN, STOCKHOLM Krona/U.S. Dollar		4.15			4.40	
(Price Per Gallon)						
Premium Gasoline 98 RON	2.70	1.30		2.80	1.41	
Regular Gasoline 93 RON	2.64	1.30		2.75	1.41	
Auto Diesel Fuel[49]	1.37	.10		1.39	.15	
Household Kerosene	1.51	.03		1.55	x	
Light Heating Oil	1.54	.03		x	x	
LPG[50]	.91	0		.87	0	
(Price Per Barrel)						
Distillate Fuel Oil	53.17	4.18		53.59	6.29	
Marine Diesel Oil	53.17	4.18		53.59	6.29	
Medium Fuel Oil 1%S	39.57	4.18		48.31	6.29	
Heavy Fuel Oil 1%S[10]	40.57	4.18		47.88	6.29	
Marine Fuel Oil 1%S	40.57	4.18		47.88	6.29	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
WESTERN EUROPE (Continued)						
SWITZERLAND, ZURICH[51] Franc/U.S. Dollar		1.63			1.82	
(Price Per Gallon)						
Premium Gasoline 98 RON	2.81	1.32	x	2.58	1.18	x
Regular Gasoline 90/91 RON	2.79	1.29	x	2.56	1.15	x
Auto Diesel Fuel	2.79	1.39	x	2.56	1.24	x
Household Kerosene	x	x	x	x	x	x
Light Heating Oil	1.14	.04	x	1.12	.04	x
LPG	2.58	.29	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	47.70	1.79	x	46.03	1.81	x
Marine Fuel Oil	x	x	x	x	x	x
Medium Fuel Oil 200 secs.	36.37	1.91	x	40.03	1.71	x
Heavy Fuel Oil 1000 secs.	31.32	2.01	x	38.78	1.80	x
Marine Fuel Oil	x	x	x	x	x	x
TURKEY, ANKARA Lira/U.S. Dollar		78.00			90.68	
(Price Per Gallon)						
Premium Gasoline 95 RON	2.28	x	.17	x	x	x
Regular Gasoline 85 RON	2.09	x	.14	x	x	x
Auto Diesel Fuel	1.26	x	.11	x	x	x
Household Kerosene	1.25	x	.11	x	x	x
Light Heating Oil	1.02	x	.05	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	42.80	x	2.10	x	x	x
Marine Diesel Fuel	x	x	x	x	x	x
Medium Fuel Oil	41.26	x	1.93	x	x	x
Heavy Fuel Oil	37.71	x	1.88	x	x	x
Marine Fuel Oil	x	x	x	x	x	x
UNITED KINGDOM, LONDON Pound/U.S. Dollar		.4217			.4191	
(Price Per Gallon)						
Premium Gasoline 97 RON[38]	2.65	1.24		2.52	1.23	
Regular Gasoline 90 RON[38]	2.60	1.24		2.51	1.23	
Auto Diesel Fuel[38]	2.72	1.25		2.56	1.24	
Household Kerosene	1.37	.02		1.38	.02	
Light Heating Oil	x	x		1.24	.07	
LPG	x	x		1.43	0	
(Price Per Barrel)						
Distillate Fuel Oil	48.64	2.90		50.53	2.95	
Marine Diesel Fuel[52]	44.10	x		45.04	0	
Medium Fuel Oil	x	x		36.01	2.92	
Heavy Fuel Oil[10]	33.84	2.90		36.01	2.92	
Marine Fuel Oil[52]	25.23	x		35.14	0	
YUGOSLAVIA, BELGRADE[53] Dinar/U.S. Dollar		27.30			31.50	
(Price Per Gallon)						
Premium Gasoline 98 RON	2.91	.94		3.12	1.04	
Regular Gasoline 87/88 RON	2.63	.84		2.88	.96	
Auto Diesel Fuel	2.27	.66		2.85	.80	
Household Kerosene	2.11	.22		2.46	.29	
Light Heating Oil	1.43	.11		1.56	.20	
LPG	1.03	.22		.98	.21	
(Price Per Barrel)						
Distillate Fuel Oil	44.19	3.93		55.52	4.54	
Marine Diesel Oil	44.19	3.93		55.52	4.54	
Medium Fuel Oil	43.69	3.86		54.26	4.04	
Heavy Fuel Oil[54]	42.63	3.58		53.00	3.79	
Marine Fuel Oil	42.63	3.58		53.000	3.79	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product		July 1980			January 1981		
			Includes			Includes	
		Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
MIDDLE EAST							
IRAN, TEHRAN[55]	Rial/U.S. Dollar		70.10			70.10	
(Price Per Gallon)							
Premium Gasoline 97 RON		.68	0		2.16	.21	
Regular Gasoline 90 RON		.54	0		1.62	.21	
Auto Diesel Fuel		.10	0		.13	.04	
Household Kerosene		.14	0		.14	.04	
Light Heating Oil		x	x		.06	x	
LPG		x	x		.44	x	
(Price Per Barrel)							
Distillate Fuel Oil		x	x		4.08	x	
Marine Diesel Fuel[56]		x	x		x	x	
Medium Fuel Oil		x	x		x	x	
Heavy Fuel Oil		x	x		x	x	
Marine Fuel Oil[57]		x	x		36.04	0	
ISRAEL, TEL AVIV[58]	Israeli Shekel/ U.S. Dollar		4.95			7.51	
(Price Per Gallon)							
Premium Gasoline 94 RON		2.64	.85 + 12% v.a.t.		3.07	1.08 + 12% v.a.t.	
Regular Gasoline 83 RON		2.49	.79 + 12% v.a.t.		2.92	1.02 + 12% v.a.t.	
Auto Diesel Fuel		1.03	(.47) + 12% v.a.t.		1.26	(.28) + 12% v.a.t.	
Household Kerosene		1.05	(.48) + 12% v.a.t.		1.28	(.28) + 12% v.a.t.	
Light Heating Oil		.97	(.47) + 12% v.a.t.		1.19	(.28) + 12% v.a.t.	
LPG		1.47	(.17) + 12% v.a.t.		1.73	(.23) + 12% v.a.t.	
(Price Per Barrel)							
Distillate Fuel Oil		39.91	(19.89) + 12% v.a.t.		49.10	(11.71) + 12% v.a.t.	
Marine Diesel Fuel		45.44	0		49.33	0	
Medium Fuel Oil		28.20	(9.21) + 12% v.a.t.		32.51	(4.34) + 12% v.a.t.	
Heavy Fuel Oil 3.3%S[59]		26.93	(10.39) + 12% v.a.t.		31.75	(4.90) + 12% v.a.t.	
Marine Fuel Oil 3.3%S		31.62	0		36.49	0	
LEBANON, BEIRUT	Pound/U.S. Dollar		3.40			3.88	
(Price Per Gallon)							
Premium Gasoline 92 RON		1.22	.24	.02	x	x	x
Regular Gasoline		x	x	x	x	x	x
Auto Diesel Fuel		x	x	x	x	x	x
Household Kerosene		.67	.10	.02	x	x	x
Light Heating Oil		.78	.02	0	x	x	x
LPG		x	x	x	x	x	x
(Price Per Barrel)							
Distillate Fuel Oil		x	x	x	x	x	x
Marine Diesel Oil[12]		58.80	.84	0	x	x	x
Medium Fuel Oil		x	x	x	x	x	x
Heavy Fuel Oil		19.74	.56	0	x	x	x
Marine Fuel Oil		35.28	.58	0	x	x	x
SAUDI ARABIA, RAS TANURA	Riyal/U.S. Dollar		3.32			3.33	
(Price Per Gallon)							
Premium Gasoline 95 RON		.25	0		.25	0	
Regular Gasoline 83.5 RON		.23	0		.23	0	
Auto Diesel Fuel		x	x		x	x	
Household Kerosene		x	x		x	x	
Light Heating Oil		x	x		x	x	
LPG		x	x		x	x	
(Price Per Barrel)							
Distillate Fuel Oil		x	x		x	x	
Marine Diesel Fuel		46.39	x		47.72	x	
Medium Fuel Oil		x	x		x	x	
Heavy Fuel Oil		x	x		x	x	
Marine Fuel Oil		26.44	x		34.40	x	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
AFRICA						
ETHIOPIA, ADDIS ABABA Birr/U.S. Dollar		2.07			2.07	
(Price Per Gallon)						
Premium Gasoline 93 RON	1.65	.28		1.65	.28	
Regular Gasoline 79/82 RON	1.38	.23		1.38	.23	
Auto Diesel Fuel	.97	.16		.97	.16	
Household Kerosene	1.19	.13		x	x	
Light Heating Oil	x	x		.56	0	
LPG	x	x		1.07	.25	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel[60]	x	x		46.25	0	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	x	x		x	x	
Marine Fuel Oil 3.5%S[60]	23.62	0		34.53	0	
GHANA, ACCRA[61] Cedi/U.S. Dollar		2.78			2.75	
(Price Per Gallon)						
Premium Gasoline 93/95 RON	2.25	x	.57	3.42	.06	.57
Regular Gasoline 84/87 RON	2.10	x	.49	3.12	.06	.49
Auto Diesel Fuel	1.20	x	.07	1.97	.06	.07
Household Kerosene	1.05	x	x	1.87	.06	.07
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	.83	0	0
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	58.02	0	0
Marine Diesel Fuel	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil[10]	x	x	2.81	43.39	0	0
Marine Fuel Oil	x	x	2.51	43.39	0	0
KENYA, NAIROBA Shilling/U.S. Dollar		7.27			7.61	
(Price Per Gallon)						
Premium Gasoline 93 RON	x	x	x	x	x	x
Regular Gasoline 83 RON	x	x	x	x	x	x
Auto Diesel Fuel	x	x	x	x	x	x
Household Kerosene	x	x	x	x	x	x
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Oil[62]	45.84	x	x	48.26	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil[62]	27.93	x	x	33.03	x	x
MOROCCO, RABAT Dirham/U.S. Dollar		3.78			4.46	
(Price Per Gallon)						
Premium Gasoline 95/98 RON	3.65	.66		3.10	.56	
Regular Gasoline 88 RON	3.45	.65		2.93	.55	
Auto Diesel Fuel	1.85	.28		1.57	.24	
Household Kerosene	1.85	.28		1.57	.24	
Light Heating Oil	x	x		x	x	
LPG	1.31	.12		1.11	.10	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	48.93	0		48.93	0	
Medium Fuel Oil	42.50	3.41		36.05	2.89	
Heavy Fuel Oil[63]	34.54	2.95		29.30	2.51	
Marine Fuel Oil	33.03	0		33.03	0	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
AFRICA (Continued)						
SOUTH AFRICA, CAPETOWN[64] Rand/U.S. Dollar		.7645			.7484	
(Price Per Gallon)						
Premium Gasoline 98 RON	2.54	.46 + 4%	.05	2.59	.47 + 4%	.05
Regular Gasoline 87 RON	2.48	.46 + 4%	.05	2.53	.47 + 4%	.05
Auto Diesel Fuel	2.69	.50 + 4%	.01	2.75	.51 + 4%	.01
Household Kerosene	1.65	.50 + 4%	.01	1.68	.51 + 4%	.01
Light Heating Oil	2.35	.50 + 4%	.01	2.40	.51 + 4%	.01
LPG	2.12	.20 + 4%	10%	2.21	.20 + 4%	10%
(Price Per Barrel)						
Distillate Fuel Oil	79.98	21.12 + 4%	.38	81.70	21.58 + 4%	.39
Marine Diesel Fuel	45.39	x	x	45.39	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	43.34	21.12 + 4%	.38	44.27	21.58 + 4%	.39
Marine Fuel Oil	25.87	x	x	37.09	x	x
TUNISIA, TUNIS Dinar/U.S. Dollar		.3977			.4292	
(Price Per Gallon)						
Premium Gasoline 95/98 RON	x	x	x	2.20	1.62	0
Regular Gasoline 87/88 RON	x	x	x	2.07	1.55	0
Auto Diesel Fuel	x	x	x	.79	x	0
Household Kerosene	x	x	x	.44	.18	0
Light Heating Oil[65]	x	x	x	.48	.17	0
LPG	x	x	x	.68	.12	.37
(Price Per Barrel)						
Distillate Fuel Oil[65]	x	x	x	14.28	4.62	0
Marine Diesel Oil	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil[65]	x	x	x	12.24	6.15	0
Marine Fuel Oil	x	x	x	x	x	x
FAR EAST AND OCEANIA						
AUSTRALIA, CANBERRA[66] Dollar/U.S. Dollar		.8478			.6236	
(Price Per Gallon)						
Premium Gasoline 97 RON	1.63	.23	.23	1.87	x	x
Regular Gasoline 89/92 RON	1.51	.23	.23	1.57	x	x
Auto Diesel Fuel	1.53	.23	.23	1.61	x	x
Household Kerosene	1.66	0	.28	1.33	x	x
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	51.50	x	x
Marine Diesel Fuel[67 68]	47.88	x	x	48.53	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil[67]	30.63	x	x	33.78	x	x
BURMA, RANGOON[69] Kyat/U.S. Dollar		6.51			6.87	
(Price Per Gallon)						
Premium Gasoline	x	x		x	x	
Regular Gasoline 80 RON	.45	.03		.42	.02	
Auto Diesel Fuel	.32	.02		.30	.02	
Household Kerosene	.32	.02		.30	.02	
Light Heating Oil	.32	.02		.30	.02	
LPG	x	x		x	x	
(Price Per Barrel)						
Distillate Fuel Oil	x	x		x	x	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	x	x		x	x	
Marine Fuel Oil	x	x		x	x	

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980 Consumer Price	July 1980 Includes Tax	July 1980 Includes Customs Duty[1]	January 1981 Consumer Price	January 1981 Includes Tax	January 1981 Includes Customs Duty[1]
FAR EAST AND OCEANIA (Continued)						
INDIA, NEW DELHI Rupee/U.S. Dollar		7.77			7.94	
(Price Per Gallon)						
Premium Gasoline 92/93 RON	2.57	7%	1.08	x	x	x
Regular Gasoline 81/83 RON	2.49	7%	1.08	x	x	x
Auto Diesel Fuel	1.11	7%	.16	x	x	x
Household Kerosene	.75	3%	.16	x	x	x
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	44.36	7%	3.13	x	x	x
Marine Diesel Oil	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil[70]	26.11	x	x	x	x	x
INDONESIA, DJAKARTA[71] Rupiah/U.S. Dollar		625.00			627.00	
(Price Per Gallon)						
Premium Gasoline 98 RON	1.33	20%		1.33	20%	
Regular Gasoline 87 RON	.91	20%		.91	20%	
Auto Diesel Fuel	.27	20%		.27	20%	
Household Kerosene	.23	20%		.23	20%	
Light Heating Oil	x	x		x	x	
LPG	x	x		x	x	
(Price Per Barrel)						
Distillate Fuel Oil	11.44	20%		11.40	20%	
Marine Diesel Fuel	x	x		x	x	
Medium Fuel Oil	x	x		x	x	
Heavy Fuel Oil	11.44	20%		11.40	20%	
Marine Fuel Oil	x	x		x	x	
JAPAN, TOKYO[72] Yen/U.S. Dollar		220.00			200.00	
(Price Per Gallon)						
Premium Gasoline 97/99 RON	2.89	.93 + 3.5%	.04	2.93	1.02 + 3.5%	.04
Regular Gasoline 89/91 RON	2.72	.93 + 3.5%	.04	2.74	1.02 + 3.5%	.04
Auto Diesel Fuel	1.93	.42 + 3.5%	.03	1.93	.46 + 3.5%	.04
Household Kerosene	1.53	3.5%	.02	1.44	3.5%	.02
Light Heating Oil	x	x	x	x	x	x
LPG	2.17	.16	.01	2.39	.18	.01
(Price Per Barrel)						
Distillate Fuel Oil 1%S	53.48	3.5%	.90	52.47	3.5%	.99
Marine Diesel Fuel	47.70	3.5%	.90	51.67	3.5%	.99
Medium Fuel Oil 2%S[10]	52.03	3.5%	2.18	52.47	3.5%	2.39
Heavy Fuel Oil 3.6S	44.80	3.5%	2.12	44.52	3.5%	2.34
Marine Fuel Oil	41.91	3.5%	2.12	43.56	3.5%	2.34
S. KOREA, SEOUL[73] Won/U.S. Dollar		605.40			657.00	
(Price Per Gallon)						
Premium Gasoline 97 RON	x	x	x	5.07	2.83	x
Regular Gasoline 86 RON	x	x	x	3.92	2.20	x
Auto Diesel Fuel	x	x	x	1.24	.16	x
Household Kerosene	x	x	x	1.30	.10	x
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	2.36	.16	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	44.12	3.78	x
Marine Diesel Oil	x	x	x	45.59	3.88	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	42.85	3.62	x
Marine Fuel Oil	x	x	x	x	x	x

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
FAR EAST AND OCEANIA (Continued)						
PAKISTAN, ISLAMABAD[74] Rupee/U.S. Dollar		9.90			9.90	
(Price Per Gallon)						
Premium Gasoline 87 RON	1.99	.34	.34	2.11	.34	.34
Regular Gasoline 80 RON	1.70	.34	.34	1.91	.34	.34
Auto Diesel Fuel	1.08	.10	.10	1.17	.10	.10
Household Kerosene	.96	0	0	1.05	0	0
Light Heating Oil	x	x	x	x	x	x
LPG	.51	0	0	.62	0	0
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Fuel	x	x	x	x	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil 1-1.2%S	18.96	.53	.53	18.96	.53	.53
Marine Fuel Oil	x	x	x	x	x	x
PHILIPPINES, MANILA[38] Peso/U.S. Dollar		7.456			7.650	
(Price Per Gallon)						
Premium Gasoline 93 RON	2.28	1.13		2.45	1.25	
Regular Gasoline 81 RON	2.18	1.08		2.35	1.21	
Auto Diesel Fuel	1.22	.14		1.39	.23	
Household Kerosene	1.22	.11		1.39	.19	
Light Heating Oil	x	x		x	x	
LPG	1.24	.06		1.37	.23	
(Price Per Barrel)						
Distillate Fuel Oil	35.18	2.99		37.20	5.61	
Marine Diesel Fuel[12 75]	49.60	x		51.61	x	
Medium Fuel Oil	32.63	2.99		37.20	5.61	
Heavy Fuel Oil[10]	32.63	2.99		37.20	5.61	
Marine Fuel Oil	29.43	x		36.04	x	
SINGAPORE, SINGAPORE[74 76] Dollar/U.S. Dollar		2.10			2.08	
(Price Per Gallon)						
Premium Gasoline 97 RON	1.85	.65	.65	1.85	.65	x
Regular Gasoline 85 RON	1.71	.62	.62	1.71	.62	x
Auto Diesel Fuel	1.18	0	0	x	x	x
Household Kerosene	1.40	.01	.01	x	x	x
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	x	x	x
(Price Per Barrel)						
Distillate Fuel Oil	x	x	x	x	x	x
Marine Diesel Oil[77]	45.58	x	x	45.58	x	x
Medium Fuel Oil	x	x	x	x	x	x
Heavy Fuel Oil	x	x	x	x	x	x
Marine Fuel Oil[77]	27.78	x	x	36.04	x	x
SRI LANKA, COLOMBO Rupee/U.S. Dollar		16.50			17.90	
(Price Per Gallon)						
Premium Gasoline 90 RON[78]	2.01	1%	0	1.98	1%	0
Regular Gasoline	x	x	x	x	x	x
Auto Diesel Fuel[79]	1.06	1%	5%	1.26	1%	5%
Household Kerosene	.76	1%	0	.82	1%	0
Light Heating Oil	x	x	x	x	x	x
LPG	x	x	x	.63	1%	0
(Price Per Barrel)						
Distillate Fuel Oil 500 secs.	x	x	x	39.47	1%	0
Marine Diesel Fuel	56.49	0	0	58.50	0	0
Medium Fuel Oil 800 secs.	x	x	x	39.08	1%	0
Heavy Fuel Oil 3500 secs.[80]	25.44	1%	0	31.76	1%	0
Marine Fuel Oil	27.48	0	0	38.14	0	0

Footnotes on page 62.

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Table 23. WORLD SURVEY OF PETROLEUM PRODUCT PRICES (Continued)

(U.S. Dollars)

Region and Country/Product	July 1980			January 1981		
		Includes			Includes	
	Consumer Price	Tax	Customs Duty[1]	Consumer Price	Tax	Customs Duty[1]
FAR EAST AND OCEANIA (Continued)						
THAILAND, BANGKOK[81] Baht/U.S. Dollar		20.46			20.67	
(Price Per Gallon)						
Premium Gasoline 95 RON	1.81	.75	.54	2.22	x	x
Regular Gasoline 83 RON	1.71	.71	.54	2.13	x	x
Auto Diesel Fuel	1.21	.18	.10	1.38	x	x
Household Kerosene	1.05	.07	.01	1.14	x	x
Light Heating Oil	1.16	negl.	negl.	1.33	x	x
LPG	.92	negl.	negl.	1.01	x	x
(Price Per Barrel)						
Distillate Fuel Oil 600 secs.	29.61	x	x	36.79	x	x
Marine Diesel Fuel[68]	47.59	x	x	47.59	x	x
Medium Fuel Oil 1200 secs.	28.29	.01	.01	35.62	x	x
Heavy Fuel Oil 1500 secs.[10]	28.05	.01	.01	34.99	x	x
Marine Fuel Oil	30.03	x	x	37.54	x	x

Abbreviations: negl. = Negligible, less than 0.5 U.S. cents. RON = Minimum research octane number. S = Maximum sulfur content. secs. = Seconds (a measure of viscosity). v.a.t. = Value-added tax. x = Not reported.

[1]Customs duty value is nil unless amount is given.
[2]Price at Montreal.
[3]Full service, leaded gasoline.
[4]Price excluding tax.
[5]Price at New York.
[6]Price paid by electric utilities: (1980) $24.64; (1981) $33.74.
[7]Customs duty ad valorum.
[8]Price to electric utilities: (1981) $18.81, tax and customs duty value nil.
[9]Additional taxes are paid by the national petroleum company (YPFB) at 19 percent to the Federal Government, and 11 percent to the development corporation of the States in which the hydrocarbons are extracted.
[10]Same price paid by electric utilities.
[11]Price at Valparaiso.
[12]Price for gasoil.
[13]Prices for 1980 effective September 26.
[14]Price paid by electric utilities: (1980 and 1981) $25.57.
[15]Price per "Ecuadorian gallon." The "Ecuadorian gallon" is equivalent to 85-90 percent of a U.S. gallon.
[16]1981 prices effective February 24.
[17]Price for gasoline 63 octane used primarily by the poor as fuel for cookstoves.
[18]Number 6 fuel oil only grade sold.
[19]Refinery gate price.
[20]Price at Bilboa.
[21]Consumer tax assessed at the refinery gate.
[22]Price paid by electric utilities: (1981) $52.68, tax value is nil.
[23]Price paid by electric utilities: (1980) $21.71, $2.27 tax; (1981) $22.61, $2.20 tax.
[24]15 percent surcharge applicable to all vessels lifting bunkers only.
[25]Price paid by electric utilities: (1980 and 1981) $3.18, tax value is negligible.
[26]Tax includes Special Charge.
[27]Special Charge is based on the net weight multiplied by the average border value of crude oil on a quarterly basis. The charge is not included in the basis of valuation in assessing value-added tax.
[28]Average retail price at drug stores.
[29]Price for car lots, free loading station Schwechat refinery.
[30]Excise taxes eliminated on petroleum products other than automotive fuels October 1, 1980.
[31]Price at Antwerp.
[32]Tax includes compulsory storage fee, energy tax, and turnover tax based on value-added.
[33]Price paid by retail dealer.
[34]Price for bulk deliveries.
[35]Prices for 1981 effective April 1.
[36]Price excluding excise tax.
[37]Price paid by electric utilities, 2.7%S: (1980) $31.19, $2.19 tax; (1981) $33.96, $2.54 tax.
[38]Tax includes value-added tax.
[39]Tax recovered by industrial consumers.
[40]Tax includes excise tax, value-added tax, and stockpiling levy.

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[41]Price paid by electric utilities, 4%S: (1980) $12.93, $1.12 tax; (1981) $11.77, $1.02 tax.
[42]Tax includes value-added tax assessed at the refinery gate.
[43]Price paid by electric utilities, 3-3.4%S: (1980) $31.12, $4.00 tax, 3.5% customs duty; (1981) $35.53, $4.79 tax, 3.5% customs duty.
[44]Price paid by all customers for 1-1.5%S: (1980) $33.64, $4.31 tax, 3.5% customs duty; (1981) $36.35, $4.90 tax, 3.5% customs duty.
[45]Price excluding value-added tax.
[46]Taxes recovered as subsidies from the Supply Fund.
[47]Price at Mediterranean ports.
[48]Price paid by electric utilities: (1981) $35.15, $.08 tax.
[49]An additional kilometer tax based on distance driven is assessed at $.29 (July 1980) and $.34 (January 1981) per 10 kilometers for vehicles between 1400-1500 kilograms gross weight.
[50]Sold only in bulk to industry.
[51]Tax includes sales turnover tax, customs duty, and other charges.
[52]Price in the Thames area.
[53]Tax is a turnover tax paid by the consumer.
[54]Price paid by electric utilities: (1980) $42.63, $3.30 tax; (1981) $53.00, $3.53 tax.
[55]Prices for 1980 effective September.
[56]Diesel bunkerage not available for sale to non-Iranian vessels.
[57]Price at Kharg Island.
[58]Taxes assessed at the refinery or oil terminal. Tax amount in parentheses is refunded to wholesalers.
[59]Price paid by electric utilities, 3.8%S: (1980) $23.80, ($12.20) + 12% tax; (1981) $27.99, ($6.96) + 12% tax.
[60]Price at Assab.
[61]Customs duty was removed from fuel oils on November 6, 1980.
[62]Price at Mombassa.
[63]Price paid by electric utilities: (1980) $39.31, 2.98 tax; (1981) $33.34, 2.53 tax.
[64]Tax includes excise tax plus 4% sales tax. Excise tax varies with end-use.
[65]Depot price.
[66]1980 prices effective September 5 at Canberra; 1981 prices effective May 5 at Melbourne. Prices differ considerably between Australian cities.
[67]Price at Melbourne.
[68]Grade is Light Marine Diesel Fuel.
[69]Prices are official prices, in effect since 1974. As supplies are limited many sales of petroleum products are made on the unofficial market at higher prices.
[70]Price at Bombay excluding 5% sales tax.
[71]Tax includes 10% excise tax and 10% sales tax.
[72]The 3.5% petroleum tax is levied at Customs.
[73]1981 prices effective November 18, 1980.
[74]Excise tax is assessed on locally-refined products while customs duty is assessed on imported products.
[75]15% surcharge applicable to all vessels lifting bunkers only.
[76]1980 prices effective August 29.
[77]Price at P. Bukom.
[78]Customs duty on gasoline would be $.11 if imported.
[79]Customs duty based on c.i.f. value.
[80]Price paid by electric utilities, 1000 secs.: (1981) $38.10, 1% tax.
[81]Business turnover tax and municipal tax are assessed on locally-refined products while only customs duty is assessed on imported products.

Note: Petroleum product prices represent consumer/retail prices, including tax. Prices per gallon relate to low-volume consumption, e.g., private transportation and household consumers. Liquefied petroleum gas (LPG) prices refer to prices for residential propane or a mixture of propane and butane. Prices per barrel relate to high-volume consumption, e.g., multiple family dwelling units, large commercial and industrial consumers. Marine bunker fuel prices are posted prices, not adjusted for premie or discounts that are generally given. Countries in the survey that assess value-added tax on petroleum products include: Argentina, Austria, Belgium, Bolivia, Brazil, Chile, Colombia, Denmark, Ecuador,. France, West Germany, Ireland, Israel, Italy, South Korea, Luxembourg, Morocco, Netherlands, Norway, Panama, Peru, Sweden, United Kingdom, and Uruguay.

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World Natural Gas Supply and Disposition

Table 24. WORLD NATURAL GAS PRODUCTION, 1979

(Billion Cubic Feet)

REGION AND COUNTRY	GROSS PRODUCTION[a]	VENTED, FLARED	REINJECTED	MARKETED PRODUCTION[a]	DRY GAS PRODUCTION[a]
NORTH AMERICA					
CANADA	3,760	56	390	3,314	2,660
MEXICO	753	NA	NA	753	753
UNITED STATES	21,883	167	1,245	20,471	19,663
TOTAL	**26,396**	**NA**	**NA**	**24,538**	**23,076**
CENTRAL AND SOUTH AMERICA					
ARGENTINA	308	NA	NA	308	308
BOLIVIA	157	11	76	70	70
COLUMBIA	122	NA	NA	122	122
TRINIDAD AND TOBAGO	158	NA	NA	158	158
VENEZUELA	1,305	82	647	576	540
OTHER	103	NA	NA	103	103
TOTAL	**2,152**	**NA**	**NA**	**1,336**	**1,300**
WESTERN EUROPE					
FRANCE	278	NA	NA	278	278
GERMANY, WEST	740	NA	NA	740	740
ITALY	476	NA	NA	476	476
NETHERLANDS	3,407	NA	NA	3,407	3,407
NORWAY	760	NA	NA	760	760
UNITED KINGDOM	1,364	NA	NA	1,364	1,364
OTHER	143	NA	NA	143	143
TOTAL	**7,168**	**NA**	**NA**	**7,168**	**7,168**
EASTERN EUROPE AND U.S.S.R.					
GERMANY, EAST	308	NA	NA	308	308
HUNGARY	230	NA	NA	230	230
POLAND	259	NA	NA	259	259
ROMANIA	1,266	NA	NA	1,266	1,266
U.S.S.R.	14,359	NA	NA	14,359	14,359
OTHER	43	NA	NA	43	43
TOTAL	**16,465**	**NA**	**NA**	**16,465**	**16,465**
MIDDLE EAST					
BAHRAIN	105	NA	NA	105	105
IRAN	1,401	558	138	706	512
IRAQ	509	430	0	79	60
KUWAIT	460	126	30	304	213
QATAR	236	82	0	154	60
SAUDI ARABIA	1,786	1,342	31	413	390
U.A.E.	484	295	0	189	76
OTHER	21	NA	NA	21	21
TOTAL	**5,001**	**NA**	**NA**	**1,971**	**1,436**
AFRICA					
ALGERIA	1,539	354	269	916	520
LIBYA	829	165	424	240	177
NIGERIA	1,061	1,013	0	49	18
OTHER	62	NA	NA	62	62
TOTAL	**3,491**	**NA**	**NA**	**1,267**	**777**
FAR EAST AND OCEANIA					
AUSTRALIA	296	NA	NA	296	296
BRUNEI	324	NA	NA	324	324
CHINA	512	NA	NA	512	512
INDIA	98	35	0	62	62
INDONESIA	995	224	214	557	389
PAKISTAN	200	NA	NA	200	200
OTHER	423	66	NA	355	355
TOTAL	**2,848**	**NA**	**NA**	**2,306**	**2,139**
WORLD TOTAL	**63,521**	**NA**	**NA**	**55,051**	**52,360**

[a]Natural gas statistics from foreign sources do not always differentiate whether production is gross, marketed (wet), or dry. In the absence of other clear information, the reported figure is repeated for each level of production.

NA = Not available.

Note: Sum of components may not equal total due to independent rounding.

Sources: Refer to Appendix A.

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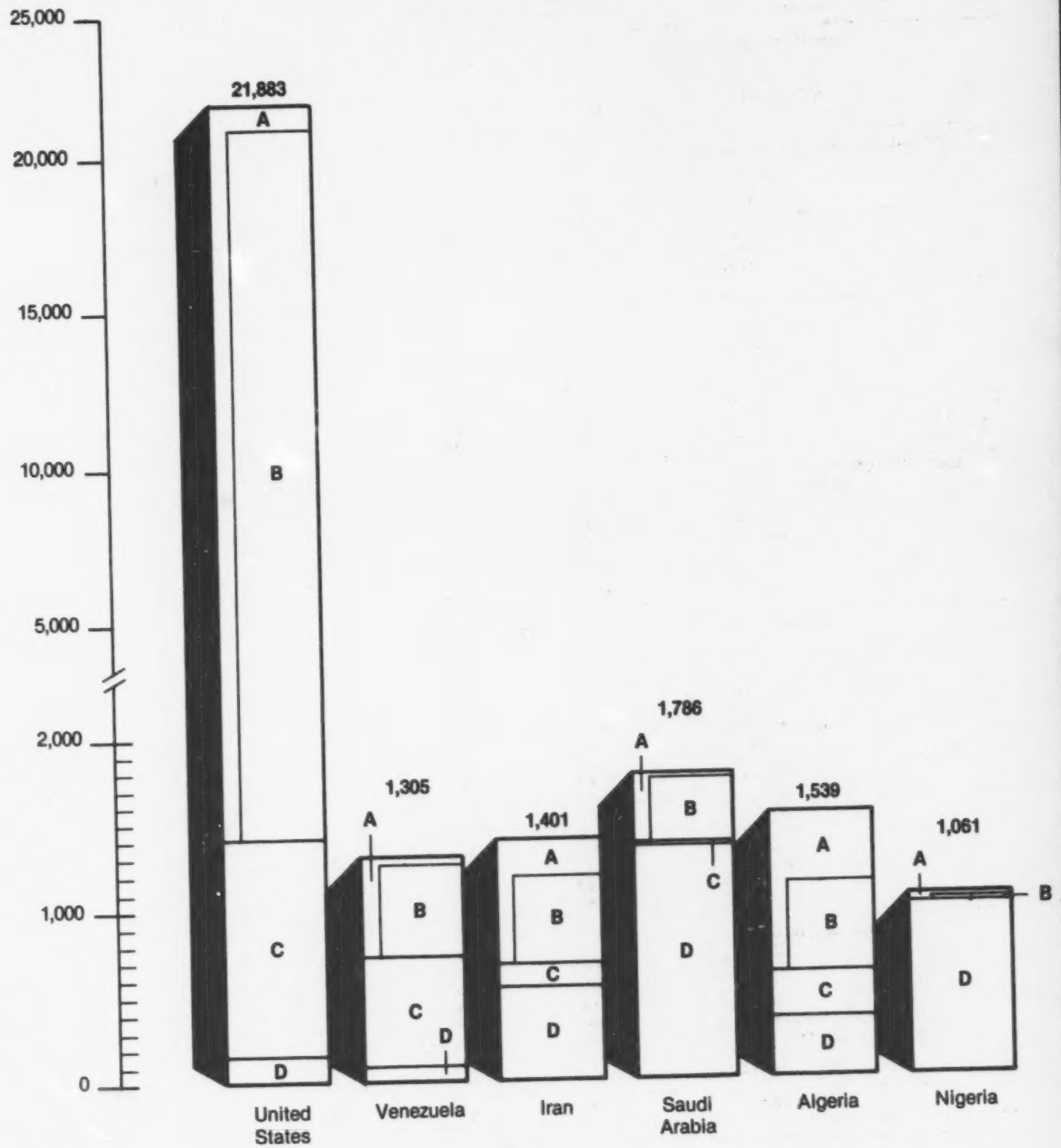
WORLD NATURAL GAS PRODUCTION, 1979

(Billion Cubic Feet)



A Marketed Production
B Dry Gas Production
C Reinjected
D Vented, Flared

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Table 25. WORLD NATURAL GAS SUPPLY AND DISPOSITION, 1979

(Billion Cubic Feet)

REGION AND COUNTRY	DRY GAS PRODUCTION	IMPORTS	EXPORTS	APPARENT CONSUMPTION
NORTH AMERICA				
CANADA	2,660	(*)	1,001	1,659
MEXICO	753	4	0	757
UNITED STATES	19,663	1,253	56	[a]20,241
TOTAL	23,076	1,258	1,057	22,657
CENTRAL AND SOUTH AMERICA				
ARGENTINA	308	70	0	378
BOLIVIA	70	0	66	4
COLOMBIA	122	0	0	122
TRINIDAD AND TOBAGO	158	0	0	158
VENEZUELA	540	0	0	540
OTHER	103	0	3	100
TOTAL	1,300	70	70	1,300
WESTERN EUROPE				
AUSTRIA	74	110	0	184
BELGIUM	1	444	0	445
FRANCE	278	678	0	956
GERMANY, WEST	740	1,356	132	1,964
ITALY	476	519	0	995
NETHERLANDS	3,407	E165	1,870	1,702
NORWAY	760	0	682	79
UNITED KINGDOM	1,364	292	0	1,656
OTHER	68	E131	0	199
TOTAL	7,168	3,695	2,684	8,180
EASTERN EUROPE AND U.S.S.R.				
BULGARIA	5	E134	0	139
CZECHOSLOVAKIA	26	259	0	285
GERMANY, EAST	308	153	0	460
HUNGARY	230	96	0	326
POLAND	259	141	0	400
ROMANIA	1,266	0	7	1,259
U.S.S.R.	14,359	E234	1,529	13,064
OTHER	13	0	0	13
TOTAL	16,465	1,017	1,536	15,945
MIDDLE EAST				
BAHRAIN	105	0	0	105
IRAN	512	0	154	358
KUWAIT	213	0	0	213
SAUDI ARABIA	390	0	0	390
OTHER	217	0	65	151
TOTAL	1,436	0	219	1,217
AFRICA				
ALGERIA	520	0	393	127
LIBYA	177	0	117	60
OTHER	80	0	0	80
TOTAL	777	0	510	266
FAR EAST AND OCEANIA				
AUSTRALIA	296	0	0	296
BRUNEI	324	0	287	37
CHINA	512	0	0	512
INDONESIA	389	0	321	68
JAPAN	95	719	0	814
PAKISTAN	200	0	0	200
OTHER	322	E5	80	247
TOTAL	2,139	724	688	2,175
WORLD TOTAL	52,360	6,763	6,763	51,740

[a]Stock changes are included in Apparent Consumption.
*Denotes less than one-half unit of measure.
E = Estimated.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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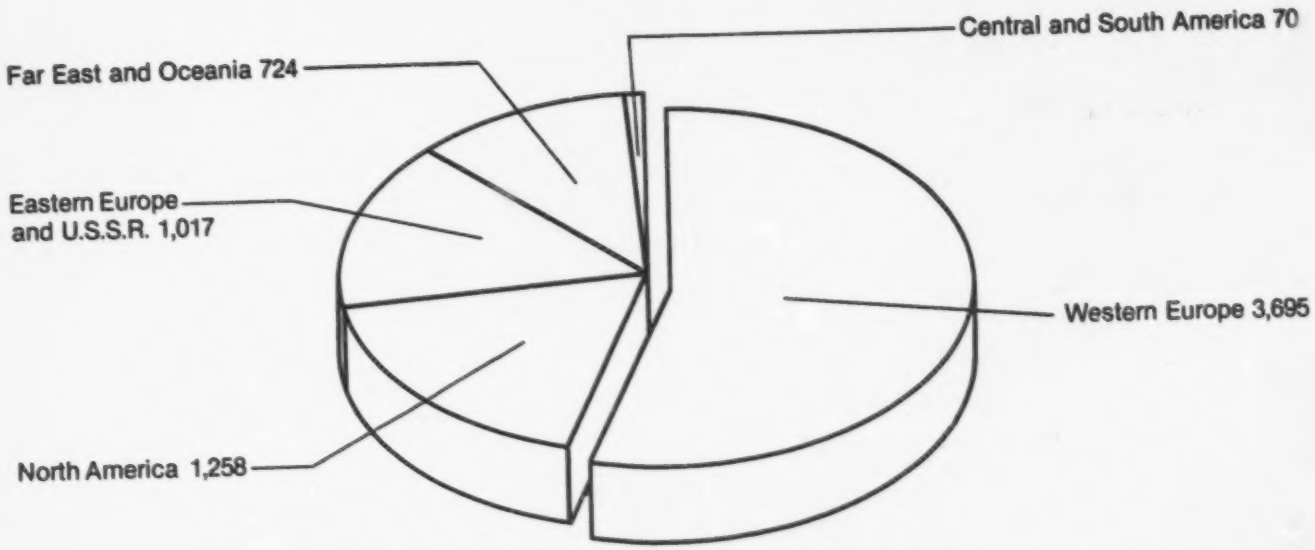
NATURAL GAS IMPORTS, 1979
(Billion Cubic Feet)

World Total — 6,763


Central and South America 70
Far East and Oceania 724
Eastern Europe and U.S.S.R. 1,017
Western Europe 3,695
North America 1,258

NATURAL GAS EXPORTS, 1979
(Billion Cubic Feet)

World Total — 6,763

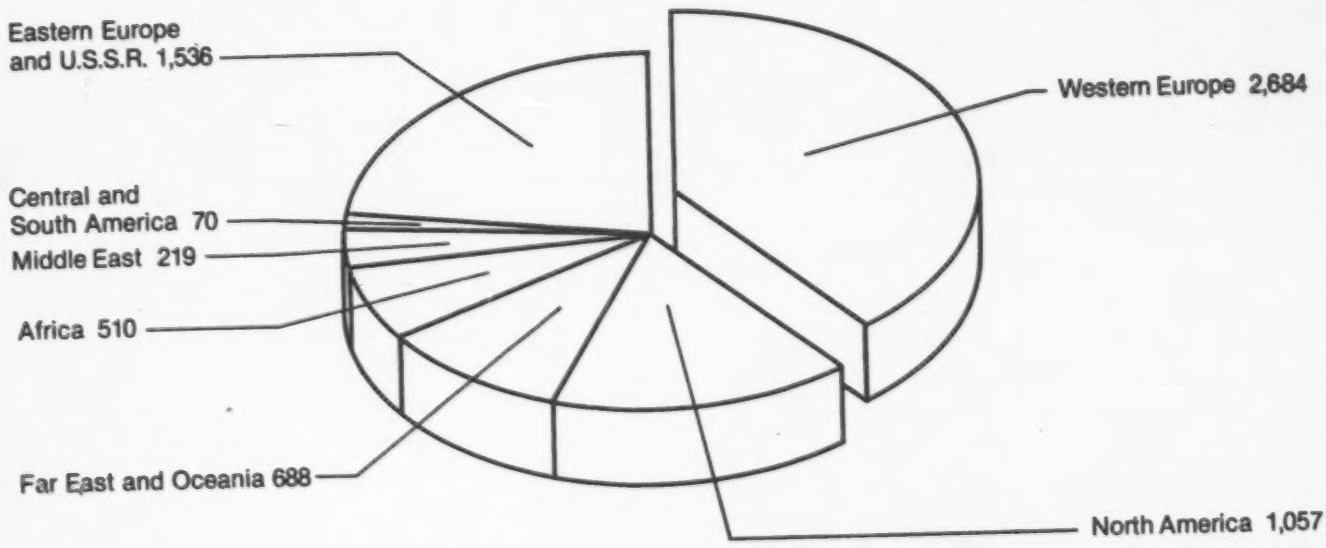


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Table 26. INTERNATIONAL NATURAL GAS FLOW, 1979

(Billion Cubic Feet)

IMPORTING COUNTRY	EXPORTING COUNTRY: North America		Central and South America		Western Europe			Eastern Europe and U.S.S.R.		Middle East		Africa		Far East and Oceania			Total
	Canada	U.S.	Bolivia	Chile	Germany, West	Netherlands	Norway	Romania	U.S.S.R.	Iran	U.A.E.	Algeria	Libya	Afghanistan	Brunei	Indonesia	
NORTH AMERICA																	
CANADA	—	(*)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(*)
MEXICO	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
UNITED STATES	1,001	—	—	—	—	—	—	—	—	—	—	[a]253	—	—	—	—	1,253
CENTRAL AND SOUTH AMERICA																	
ARGENTINA	—	—	66	3	—	—	—	—	—	—	—	—	—	—	—	—	70
WESTERN EUROPE																	
AUSTRIA	—	—	—	—	8	—	—	—	102	—	—	—	—	—	—	—	110
BELGIUM AND LUXEMBOURG	—	—	—	—	—	381	63	—	—	—	—	—	—	—	—	—	444
FINLAND	—	—	—	—	—	—	—	—	E31	—	—	—	—	—	—	—	31
FRANCE	—	—	—	—	14	493	73	—	3	—	[a]1	[a]96	—	—	—	—	678
GERMANY, WEST	—	—	—	—	—	816	216	—	324	—	—	—	—	—	—	—	1,356
ITALY	—	—	—	—	—	152	—	—	293	—	—	—	[a]74	—	—	—	519
NETHERLANDS	—	—	—	—	E104	—	61	—	—	—	—	—	—	—	—	—	165
SPAIN	—	—	—	—	—	—	—	—	—	—	—	[a]23	[a]43	—	—	—	65
SWITZERLAND	—	—	—	—	6	29	—	—	—	—	—	—	—	—	—	—	35
UNITED KINGDOM	—	—	—	—	—	—	269	—	—	—	—	[a]22	—	—	—	—	292
EASTERN EUROPE AND U.S.S.R.																	
BULGARIA	—	—	—	—	—	—	—	—	E134	—	—	—	—	—	—	—	134
CZECHOSLOVAKIA	—	—	—	—	—	—	—	—	259	—	—	—	—	—	—	—	259
GERMANY, EAST	—	—	—	—	—	—	—	—	153	—	—	—	—	—	—	—	153
HUNGARY	—	—	—	—	—	—	—	7	89	—	—	—	—	—	—	—	96
POLAND	—	—	—	—	—	—	—	—	141	—	—	—	—	—	—	—	141
U.S.S.R.	—	—	—	—	—	—	—	—	—	154	—	—	—	E80	—	—	234
FAR EAST AND OCEANIA																	
JAPAN	—	[a]51	—	—	—	—	—	—	—	—	[a]65	—	—	—	[a]282	[a]321	719
MALAYSIA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	5
WORLD TOTAL	1,001	56	66	3	132	1,870	682	7	1,529	154	65	393	117	80	287	321	6,763

*Denotes less than one-half unit of measure.
[a]Liquefied natural gas (LNG).
E = Estimated.
— —Indicates data not applicable.
Note: Sum of components may not equal total due to independent rounding.
Sources: Refer to Appendix A.

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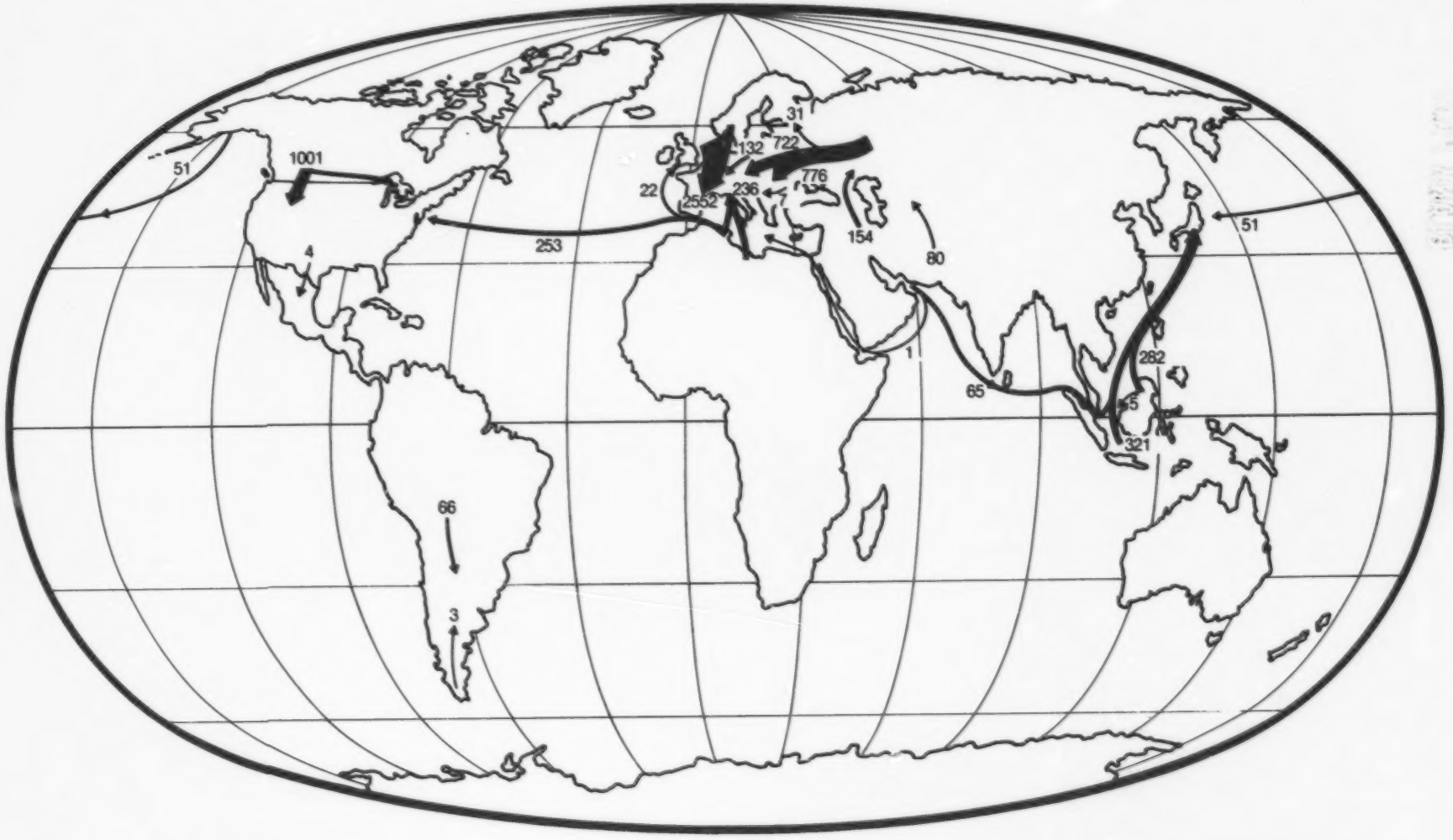
INTERNATIONAL NATURAL GAS FLOW, 1979

(Billion Cubic Feet)



Arrows Indicate Origin and Destination
But Not Necessarily Specific Routes

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Energy Information Administration

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World Coal Supply and Disposition

Table 27. WORLD COAL PRODUCTION, 1979

(Thousand Short Tons)

REGION AND COUNTRY	PRIMARY			SECONDARY		
	Anthracite	Bituminous Coal	Lignite	Coke	Bituminous Briquets	Lignite Briquets
NORTH, CENTRAL AND SOUTH AMERICA						
CANADA	—	28,001	5,012	6,353	—	—
UNITED STATES	4,835	734,397	41,902	56,600	—	—
MEXICO	—	8,109	—	2,772	—	—
BRAZIL	—	5,107	—	4,180	—	—
COLOMBIA	—	5,500	—	715	—	—
OTHER	—	[a]1,962	—	—	—	—
TOTAL	4,835	783,076	46,947	71,544	—	—
WESTERN EUROPE						
AUSTRIA	—	—	3,024	1,595	—	—
BELGIUM	675	6,075	—	7,096	168	—
FRANCE	4,410	16,109	2,690	12,776	1,291	1,056
GERMANY, WEST	—	[a]95,150	143,938	20,596	1,844	5,238
GREECE	—	—	26,034	193	—	83
SPAIN	4,074	8,592	11,627	4,455	72	—
TURKEY	—	7,920	14,270	1,320	—	17
UNITED KINGDOM	3,340	131,540	—	13,762	10,780	—
YUGOSLAVIA	—	515	45,844	2,736	—	—
OTHER	269	343	2,340	11,620	11	—
TOTAL	12,768	266,244	249,767	76,149	14,166	6,394
EASTERN EUROPE AND U.S.S.R.						
BULGARIA	—	[a]304	30,716	1,486	—	1,320
CZECHOSLOVAKIA	—	31,310	105,824	11,550	—	1,320
GERMANY, EAST	—	55	282,260	5,681	—	53,680
HUNGARY	—	3,309	24,975	858	—	1,320
POLAND	—	221,564	41,998	22,046	1,760	176
ROMANIA	22	8,917	27,177	3,960	825	303
U.S.S.R.	—	[b]792,191	—	95,150	715	8,250
OTHER	—	—	1,210	17	—	—
TOTAL	22	1,057,850	514,160	140,748	3,300	66,369
AFRICA						
SOUTH AFRICA	3,642	110,538	—	6,050	—	—
ZIMBABWE	—	3,507	—	220	—	—
OTHER	800	2,063	—	110	—	—
TOTAL	4,442	116,108	—	6,380	—	—
MIDDLE EAST, FAR EAST AND OCEANIA						
AUSTRALIA	—	102,625	35,932	5,198	—	1,272
CHINA	—	[b]698,500	—	38,500	—	—
INDIA	—	114,469	3,598	13,035	—	61
JAPAN	19	19,271	45	51,055	—	—
NORTH KOREA	38,060	9,460	—	3,025	—	—
SOUTH KOREA	20,024	—	—	2,564	17,600	—
MONGOLIA	—	385	4,070	—	—	—
VIETNAM	6,600	—	—	—	—	—
OTHER	—	8,199	1,721	440	61	—
TOTAL	64,703	952,909	45,366	113,817	17,661	1,333
WORLD TOTAL	86,770	3,175,987	856,240	408,638	35,127	74,096

[a]Includes anthracite.
[b]Includes anthracite and lignite.
—indicates data not applicable.
Sources: Refer to Appendix A.

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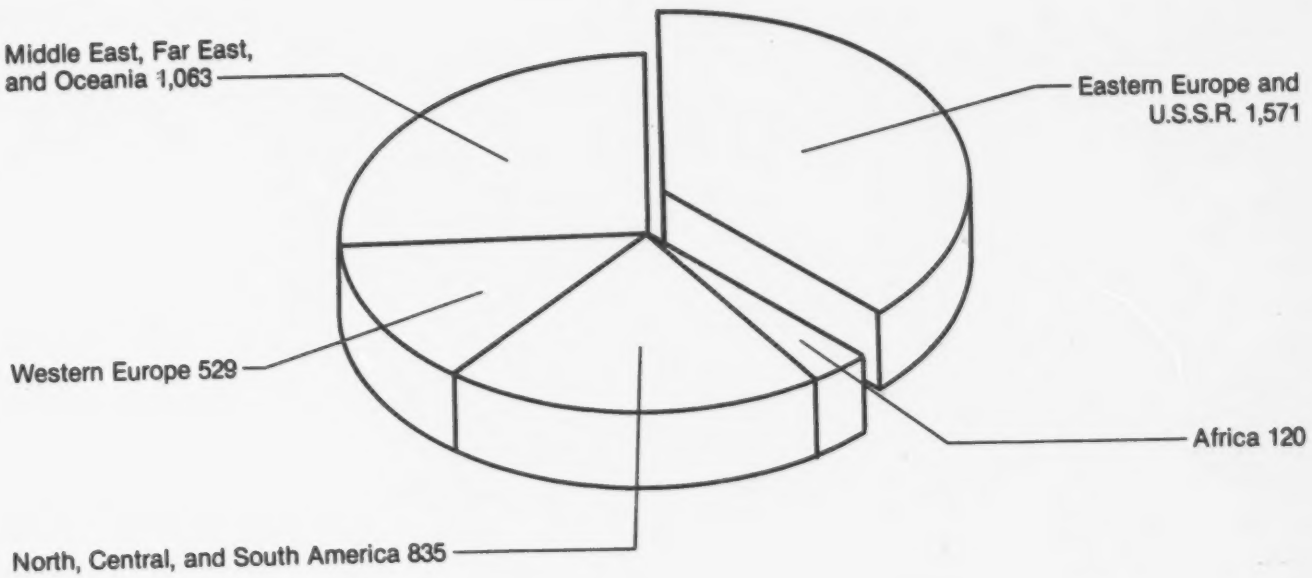
WORLD COAL PRODUCTION, 1979
(Million Short Tons)

PRIMARY
World Total — 4,119


Middle East, Far East, and Oceania 1,063
Eastern Europe and U.S.S.R. 1,571
Western Europe 529
Africa 120
North, Central, and South America 835

SECONDARY
World Total — 518

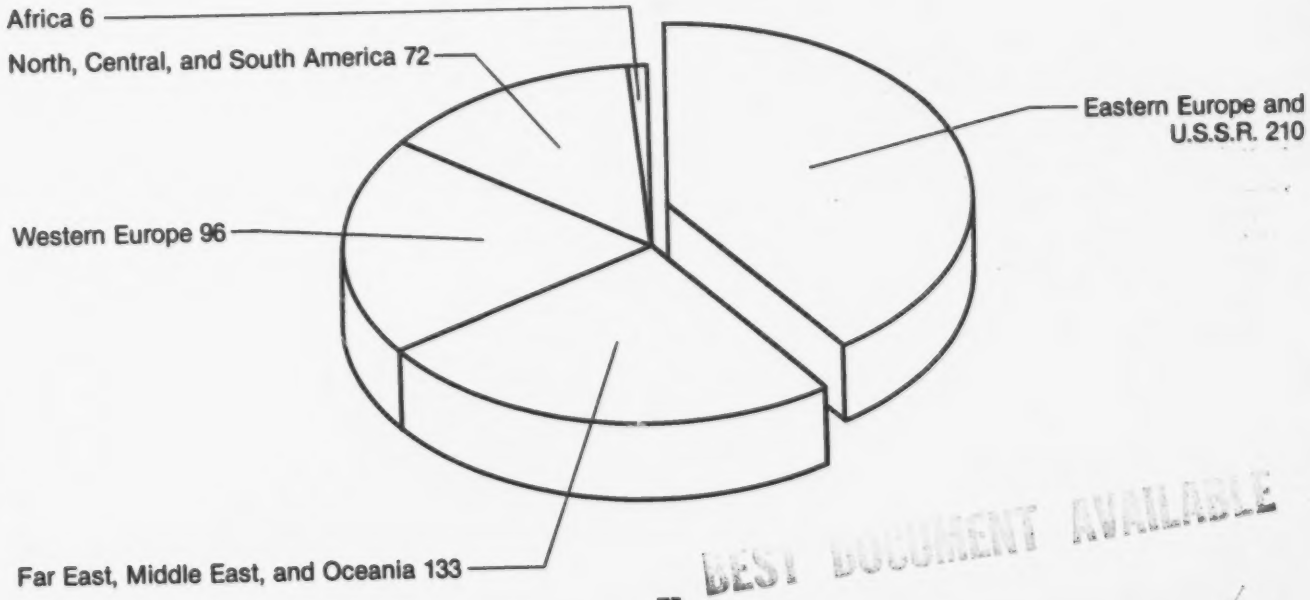

Africa 6
North, Central, and South America 72
Eastern Europe and U.S.S.R. 210
Western Europe 96
Far East, Middle East, and Oceania 133

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Table 28. WORLD COAL SUPPLY AND DISPOSITION, 1979

(Thousand Short Tons of Coal Equivalent[a])

REGION AND COUNTRY	PRODUCTION	IMPORTS[b]	EXPORTS[b]	APPARENT CONSUMPTION
NORTH, CENTRAL AND SOUTH AMERICA				
CANADA	27,826	21,496	13,957	35,365
UNITED STATES	700,726	6,145	72,167	[c]599,802
MEXICO	5,790	682	—	6,472
BRAZIL	4,186	4,873	—	9,059
COLOMBIA	5,500	—	55	5,445
OTHER	1,841	3,457	—	5,298
TOTAL	**745,869**	**36,653**	**86,179**	**661,441**
WESTERN EUROPE				
AUSTRIA	1,512	4,391	76	5,827
BELGIUM	6,169	14,796	1,429	19,536
FINLAND	—	7,262	—	7,262
FRANCE	22,128	31,073	2,033	51,168
GERMANY, WEST	138,331	11,367	28,283	121,415
GREECE	4,948	660	—	5,608
ITALY	842	15,534	601	15,775
NETHERLANDS	—	7,958	1,892	6,066
SPAIN	16,707	4,210	9	20,908
TURKEY	12,630	922	—	13,552
UNITED KINGDOM	118,870	4,895	3,088	120,677
YUGOSLAVIA	19,594	3,816	523	22,887
OTHER	595	13,830	165	14,260
TOTAL	**342,326**	**120,714**	**38,099**	**424,941**
EASTERN EUROPE AND U.S.S.R.				
BULGARIA	15,668	4,141	43	19,766
CZECHOSLOVAKIA	74,000	5,676	6,490	73,186
GERMANY, EAST	85,571	12,100	1,394	96,277
HUNGARY	11,745	2,633	25	14,353
POLAND	234,171	2,901	49,130	187,942
ROMANIA	17,999	7,064	—	25,063
U.S.S.R.	533,404	11,200	26,100	518,504
OTHER	605	214	—	819
TOTAL	**973,163**	**45,929**	**83,182**	**935,910**
AFRICA				
SOUTH AFRICA	97,000	—	21,978	75,022
ZIMBABWE	3,507	—	35	3,472
OTHER	2,763	968	303	3,428
TOTAL	**103,270**	**968**	**22,316**	**81,922**
MIDDLE EAST, FAR EAST AND OCEANIA				
AUSTRALIA	108,634	14	42,676	65,972
CHINA	598,590	—	2,043	596,547
INDIA	82,919	—	432	82,487
JAPAN	17,395	60,157	2,119	75,433
KOREA, NORTH	47,520	792	63	48,249
KOREA, SOUTH	15,156	5,758	—	20,914
MONGOLIA	1,728	—	—	1,728
VIETNAM	6,600	—	440	6,160
OTHER	7,968	7,110	546	14,532
TOTAL	**886,510**	**73,831**	**48,319**	**912,022**
WORLD TOTAL	**3,051,138**	**278,095**	**278,095**	**3,016,236**

[a]One short ton of coal equivalent = 25,190,000 Btu.
[b]Includes coke and briquets.
[c]Includes stock changes.
—Indicates data not applicable.

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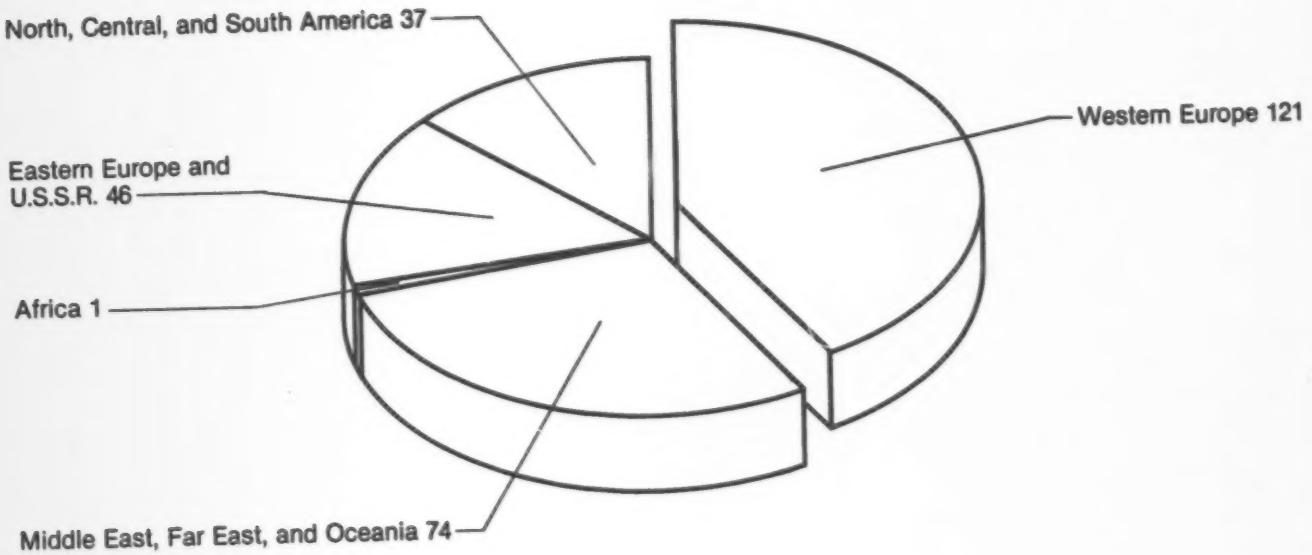
WORLD COAL SUPPLY AND DISPOSITION, 1979
(Million Short Tons of Coal Equivalent)

IMPORTS
World Total — 278


North, Central, and South America 37
Western Europe 121
Eastern Europe and U.S.S.R. 46
Africa 1
Middle East, Far East, and Oceania 74

EXPORTS
World Total — 278

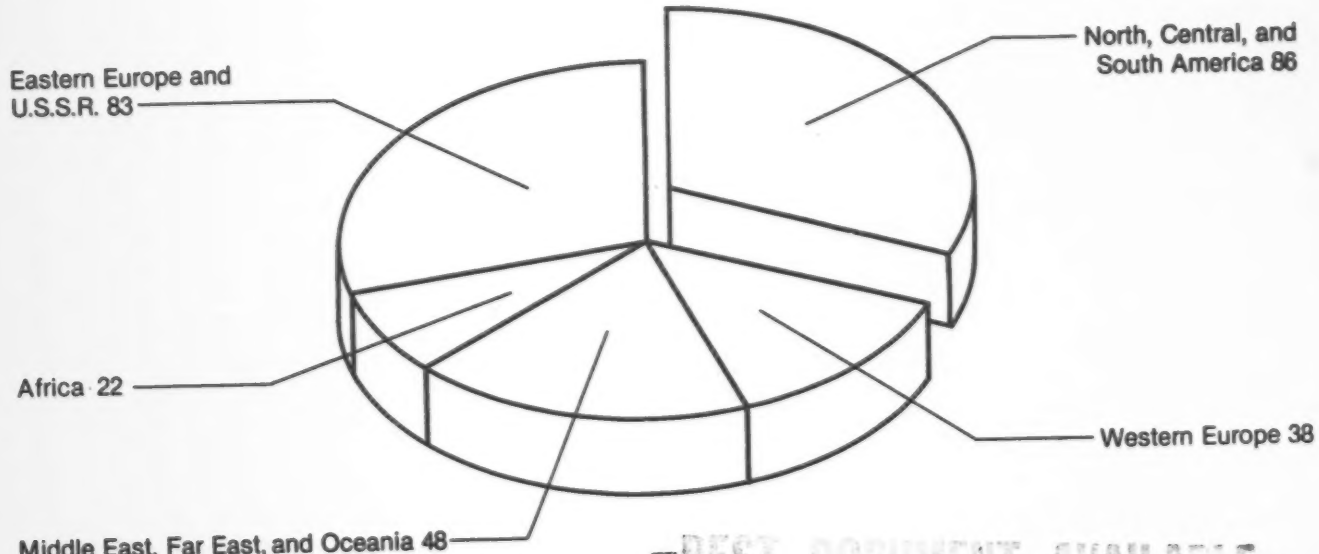

North, Central, and South America 86
Eastern Europe and U.S.S.R. 83
Africa 22
Western Europe 38
Middle East, Far East, and Oceania 48

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Table 29. INTERNATIONAL COAL FLOW, 1979[a]

(Thousand Short Tons of Coal Equivalent[b])

IMPORTERS[c]	EXPORTERS[c]													
	North America		Western Europe					Eastern Europe			Africa	Oceania	Other World	Total
	Canada	United States	Belgium	France	Germany, West	Netherlands	United Kingdom	Poland	U.S.S.R.	Other Eastern Europe	South Africa	Australia		
NORTH, CENTRAL AND SOUTH AMERICA														
CANADA	—	21,496	—	—	—	—	—	—	—	—	—	—	—	21,496
UNITED STATES	198	—	151	266	2,335	18	55	695	—	—	1,121	170	1,136	6,145
BRAZIL	420	3,032	—	25	—	—	—	1,349	—	—	—	—	47	4,873
WESTERN EUROPE														
AUSTRIA	—	—	—	19	886	—	—	1,391	735	1,288	—	—	72	4,391
BELGIUM/LUXEMBOURG	113	3,480	—	239	6,601	784	176	733	320	65	2,011	274	—	14,796
FINLAND	—	—	—	12	336	—	—	4,844	2,070	—	—	—	—	7,262
FRANCE	72	4,133	329	—	9,745	150	793	5,018	660	—	7,816	2,357	—	31,073
GERMANY, WEST	509	2,892	275	644	—	637	672	2,900	185	1,024	983	646	—	11,367
ITALY	131	5,342	4	102	2,239	—	—	3,595	950	—	2,039	1,132	—	15,534
NETHERLANDS	—	2,557	39	40	2,109	—	176	908	—	126	510	1,320	173	7,958
SPAIN	226	1,539	17	30	149	—	—	1,560	190	25	—	472	—	4,210
UNITED KINGDOM	—	1,470	—	88	333	10	—	712	—	—	34	2,221	27	4,895
YUGOSLAVIA	—	1,166	—	—	67	—	8	57	1,735	729	—	—	54	3,816
OTHER WESTERN EUROPE	295	2,783	598	141	1,418	151	520	5,626	472	101	2,124	1,143	40	15,412
EASTERN EUROPE AND U.S.S.R.														
CZECHOSLOVAKIA	—	—	—	—	—	—	—	2,473	2,865	296	—	—	42	5,676
GERMANY, EAST	—	129	16	7	495	68	—	3,547	4,900	1,438	—	—	1,500	12,100
ROMANIA	—	673	—	236	1,016	31	—	388	2,740	526	—	377	1,077	7,064
U.S.S.R.	—	—	—	—	—	—	—	11,200	—	—	—	—	—	11,200
FAR EAST														
JAPAN	10,456	16,807	—	—	—	—	—	538	2,073	—	2,237	28,046	—	60,157
KOREA, SOUTH	915	1,327	—	—	—	—	—	—	—	—	750	2,321	445	5,758
TAIWAN	57	339	—	—	—	—	—	—	—	—	—	1,792	129	2,317
OTHER WORLD	563	3,002	—	184	554	43	688	1,596	6,205	2,334	2,353	405	2,668	20,595
WORLD TOTAL	13,957	72,167	1,429	2,033	28,283	1,892	3,088	49,130	26,100	7,952	21,978	42,676	7,410	278,095

[a]Includes coke and briquets.
[b]One short ton of coal equivalent = 25,190,000 Btu.
[c]Countries listed are major importers and exporters.
—Indicates data not applicable.
Sources: Refer to Appendix A.

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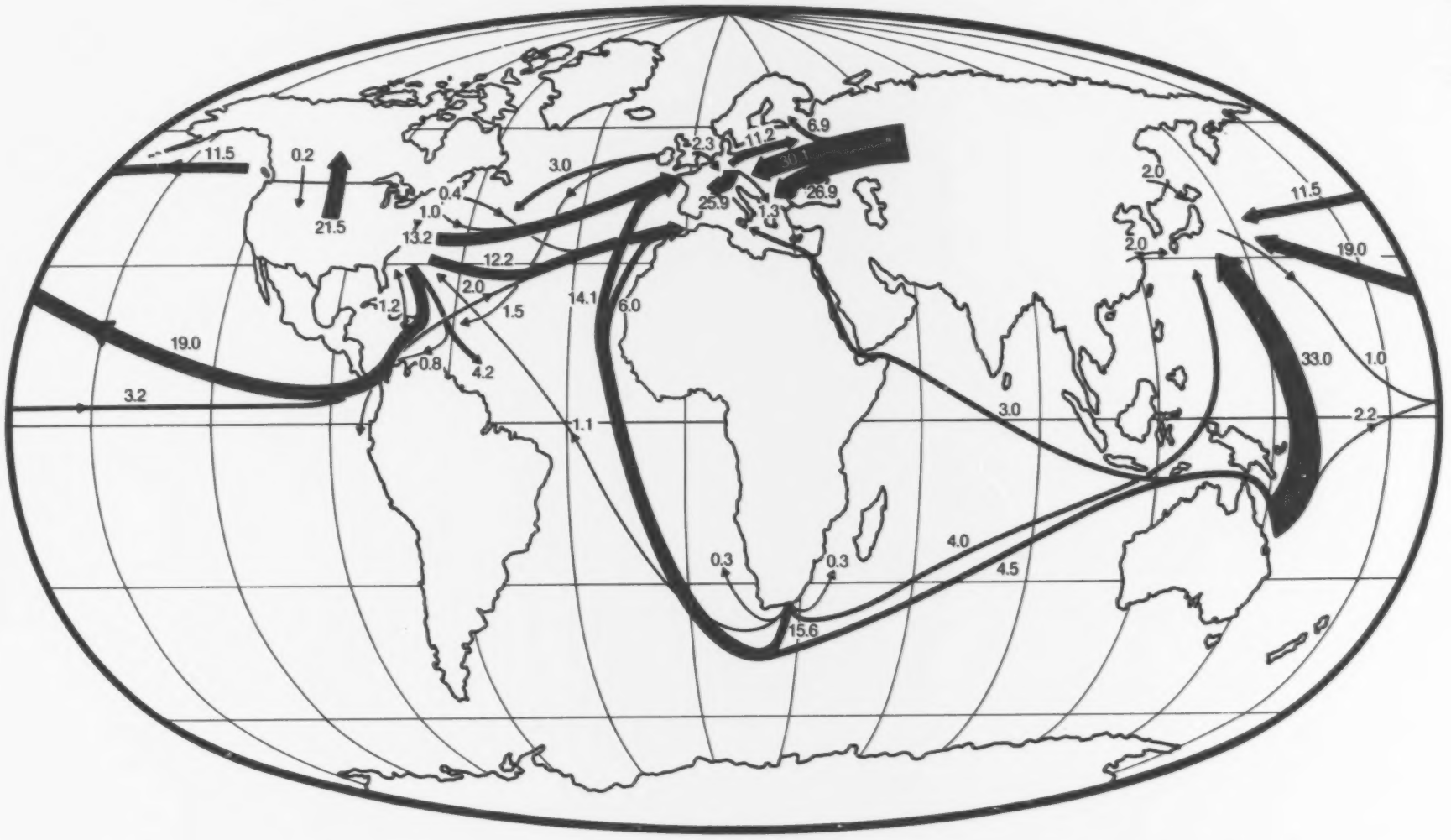
INTERNATIONAL COAL FLOW, 1979

(Million Short Tons of Coal Equivalent)



Arrows Indicate Origin and Destination
But Not Necessarily Specific Routes

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Energy Information Administration

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Energy Reserves

Table 30. WORLD CRUDE OIL AND NATURAL GAS RESERVES, JANUARY 1, 1981

AREA AND COUNTRY	CRUDE OIL (BILLION BARRELS)	NATURAL GAS (TRILLION CUBIC FEET)
NORTH AMERICA		
CANADA	6.4	87.3
MEXICO	44.0	64.5
UNITED STATES	26.4	191.0
TOTAL	**76.8**	**342.8**
CENTRAL AND SOUTH AMERICA		
ARGENTINA	2.5	22.0
ECUADOR	1.1	4.0
TRINIDAD AND TOBAGO	0.7	12.0
VENEZUELA	18.0	42.0
OTHER	3.2	15.3
TOTAL	**25.5**	**95.3**
WESTERN EUROPE		
GERMANY, WEST	0.5	6.0
GREECE	0.2	4.0
ITALY	0.6	3.5
NETHERLANDS	0.3	62.0
NORWAY	5.5	42.7
UNITED KINGDOM	14.8	24.8
OTHER	1.3	16.8
TOTAL	**23.2**	**159.8**
EASTERN EUROPE AND U.S.S.R.		
U.S.S.R.	63.0	920.0
OTHER[a]	2.8	9.4
TOTAL	**65.8**	**929.4**
MIDDLE EAST		
BAHRAIN	0.2	9.0
IRAN	57.5	485.0
IRAQ	30.0	27.5
KUWAIT	67.9	33.2
OMAN	2.3	2.5
QATAR	3.6	60.0
SAUDI ARABIA	168.0	112.4
SYRIA	1.9	1.5
UNITED ARAB EMIRATES	30.4	20.8
TOTAL	**362.0**	**751.9**
AFRICA		
ALGERIA	8.2	131.5
EGYPT	2.9	3.0
LIBYA	23.0	23.8
NIGERIA	16.7	41.0
TUNISIA	1.7	5.6
OTHER	2.6	3.6
TOTAL	**55.1**	**208.5**
FAR EAST AND OCEANIA		
AUSTRALIA	2.4	30.0
BANGLADESH	0	8.0
BRUNEI	1.7	7.3
CHINA	20.5	24.5
INDIA	2.6	12.0
INDONESIA	9.5	23.5
MALAYSIA	3.0	15.0
PAKISTAN	0.2	15.1
OTHER	0.2	15.4
TOTAL	**40.1**	**150.8**
WORLD TOTAL	**648.5**	**2,638.5**

[a]Includes Albania, Bulgaria, Cuba, Czechoslovakia, East Germany, Hungary, Mongolia, North Korea, Poland, Romania, and Vietnam.

Note: Sum of components may not equal total due to independent rounding. All reserve figures except those for the U.S.S.R. and natural gas reserves in Canada are proved reserves recoverable with present technology and prices. U.S.S.R. figures are "explored reserves," which include proved, probable, and some possible. The Canadian natural gas figure includes proved and some probable condensate.

Source: *Oil and Gas Journal*, December 29, 1980, p. 78-79. The Energy Information Administration does not necessarily subscribe to the Oil and Gas Journal data but reproduces it as a matter of convenience.

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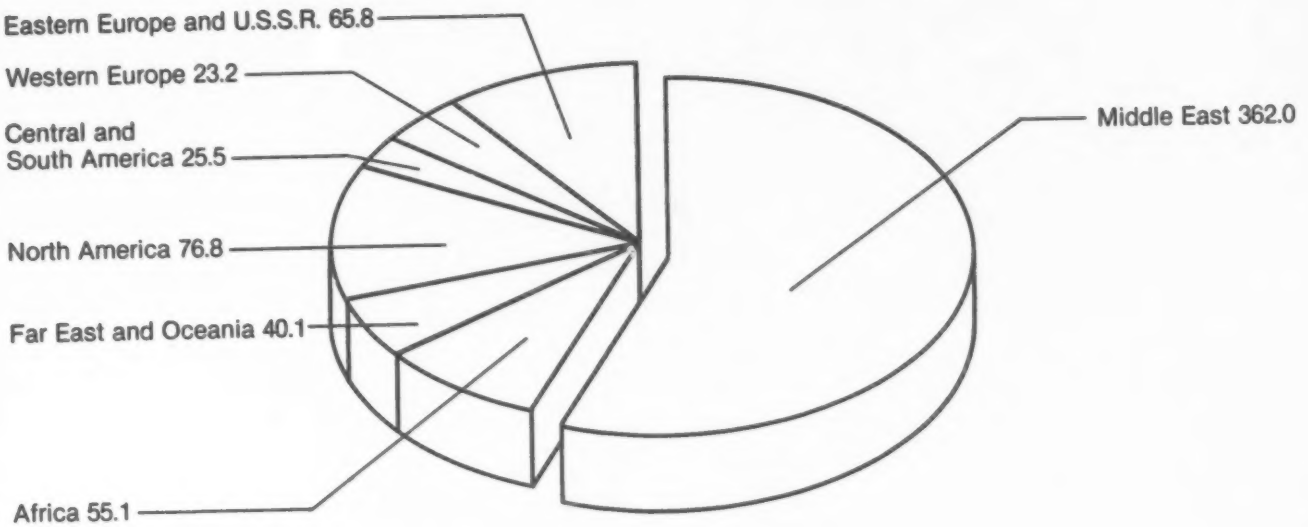
WORLD CRUDE OIL RESERVES
(Billion Barrels)

World Total — 648.5



WORLD NATURAL GAS RESERVES
(Trillion Cubic Feet)

World Total — 2,638.5

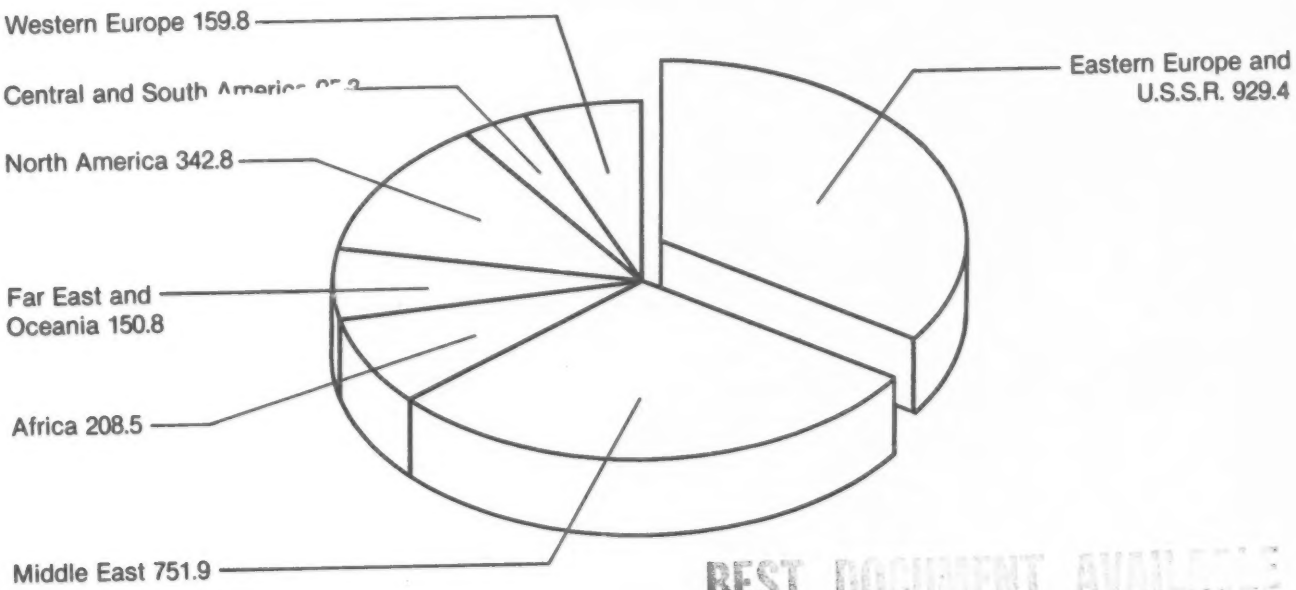


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Table 31. WORLD ESTIMATED RECOVERABLE RESERVES OF COAL

(Billion Short Tons)

Region and Country	Anthracite and Bituminous Coal[a]			Lignite[b]		
	Recoverable	Portion Surface Minable	Portion of Coking Quality	Recoverable	Portion Surface Minable	Total Recoverable Coal
NORTH, CENTRAL, AND SOUTH AMERICA						
CANADA	4.18	3.82	1.40	2.33	2.33	6.51
UNITED STATES	219.20	66.41	41.35	26.90	26.90	246.10
BRAZIL	1.23	NA	0.05	0	0	1.23
CHILE	1.30	NA	NA	0	0	1.30
COLOMBIA	1.14	NA	0.20	[c]	NA	1.14
MEXICO	1.75	0.20	1.27	0	0	1.75
OTHER	0.32	0.14	NA	0	0	0.32
TOTAL	**229.11**	**NA**	**NA**	**29.23**	**NA**	**258.34**
WESTERN EUROPE						
GERMANY, WEST	26.45	0	15.87	38.75	38.75	65.19
GREECE	0	0	0	1.71	NA	1.71
TURKEY	0.20	0	0	1.90	0	2.11
UNITED KINGDOM	49.60	NA	18.35	0	0	49.60
YUGOSLAVIA	1.73	0.58	0	16.53	13.23	18.27
OTHER	1.78	[d]0.05	[d]0.49	0.66	0.60	2.44
TOTAL	**79.76**	**NA**	**NA**	**59.56**	**[d]52.57**	**139.32**
EASTERN EUROPE AND U.S.S.R.						
BULGARIA	0.03	NA	0.02	4.08	2.65	4.11
CZECHOSLOVAKIA	2.98	NA	NA	3.15	NA	6.13
GERMANY, EAST	0.11	NA	NA	27.56	27.56	27.67
HUNGARY	0.25	NA	NA	4.41	NA	4.66
POLAND	29.76	0	0	13.23	NA	42.99
ROMANIA	0.05	0	0	1.21	0	1.26
U.S.S.R.	160.94	23.92	57.32	95.90	86.31	256.84
OTHER	0	0	0	3.00	NA	3.00
TOTAL	**194.12**	**NA**	**NA**	**152.54**	**NA**	**346.66**
AFRICA						
BOTSWANA	3.86	0	0	0	0	3.86
SOUTH AFRICA	27.88	1.39	0.83	0	0	27.88
SWAZILAND	2.01	NA	0	0	0	2.01
OTHER	2.30	[d]0.57	0.51	[c]	[c]	2.30
TOTAL	**36.04**	**NA**	**1.35**	**[c]**	**[c]**	**36.04**
MIDDLE EAST, FAR EAST, AND OCEANIA						
AUSTRALIA	29.65	8.40	12.60	35.76	35.76	65.41
CHINA	109.13	109.13	40.38	[e]	[e]	109.13
INDIA	13.90	5.84	4.31	1.75	1.75	15.65
JAPAN	1.16	NA	0.60	0.02	NA	1.18
OTHER	2.52	[d]0.16	[d]0.02	0.89	0.56	3.41
TOTAL	**156.36**	**NA**	**NA**	**38.42**	**NA**	**194.76**
WORLD TOTAL	**695.29**	**NA**	**NA**	**279.74**	**NA**	**975.12**

[a]Includes subanthracite and subbituminous.
[b]Includes brown coal.
[c]Less than 5 million tons.
[d]Not all countries in this group reported under this category.
[e]May be included with anthracite and bituminous coal.
NA = Not available.
Note: Sum of components may not add due to independent rounding.
Note: The World Energy Conference has compiled these data from questionnaires submitted to National Committees of member countries or corresponding institutions of nonmember countries and from estimates based on examination of existing published sources. The reference year for most reserve data is 1979.
Source: Refer to Appendix A.

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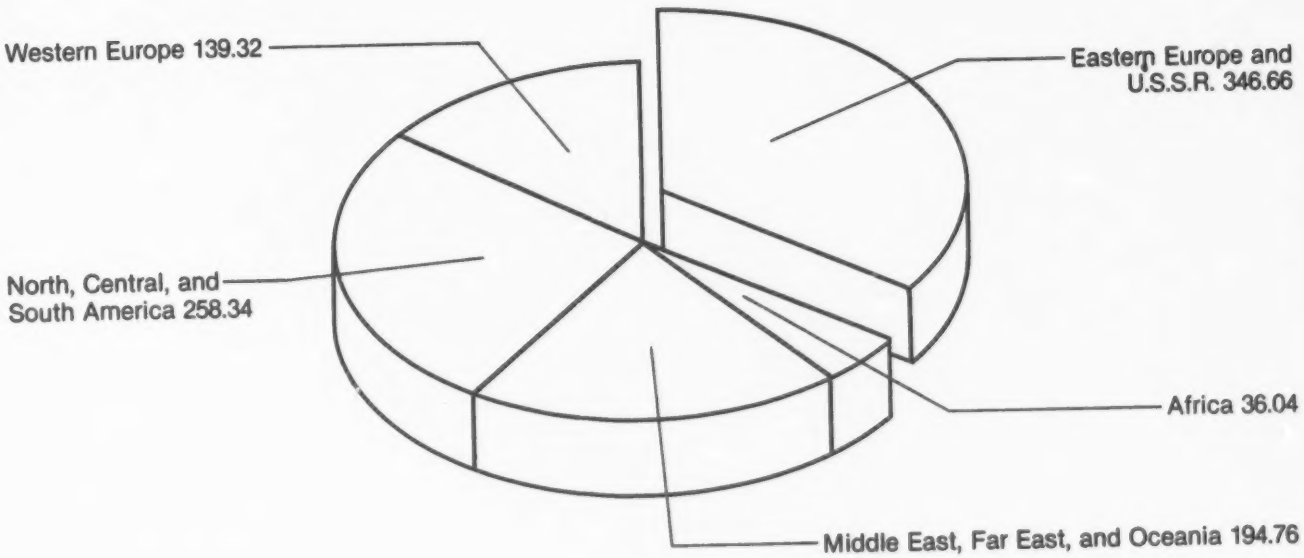
WORLD ESTIMATED RECOVERABLE RESERVES OF COAL
(Billion Short Tons)

World Total — 975.12


Western Europe 139.32
Eastern Europe and U.S.S.R. 346.66
North, Central, and South America 258.34
Africa 36.04
Middle East, Far East, and Oceania 194.76

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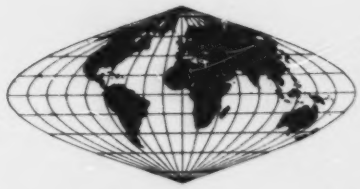

Glossary by Primary Energy Commodity

GLOSSARY BY PRIMARY ENERGY COMMODITY

Petroleum

Asphalt. A dark brown to black solid or semi-solid material obtained from petroleum processing in which the predominate component is bitumen. Used mainly in road construction.

Aviation Gasoline. Any hydrocarbon mixture suitable for use in aviation piston-type engines.

Bunkers. Fuels supplied to ships and aircraft in international transportation, irrespective of the flag of the carrier, consisting primarily of residual, distillate, and jet fuel oils.

Crude Oil. A mixture of hydrocarbons that is in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through the surface separating facilities. Crude oil production is measured at the wellhead and includes lease condensate.

Crude Oil Refinery Input. Total crude oil (including lease condensate) input to crude oil distillation units and other processing units.

Distillate Fuel Oil. A light fuel oil distilled off during the refining process. Included are products known as No. 1 and No. 2 heating oils, diesel fuels, and No. 4 fuel oil, which conform to either ASTM Specification D396 or D975. These products are used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel), and electric power generation.

Jet Fuel. Includes both naphtha-type and kerosene-type jet fuel meeting standards for use in aircraft turbine engines or meeting ASTM Specification D1655. Although most jet fuel is used in aircraft, some is used for other purposes, such as fuel for turbines to produce electricity.

Kerosene. Light hydrocarbon distillates in the 150° to 280° Centigrade (300° to 550° Fahrenheit) distillation range. Includes vaporizing oil for use in reciprocating engines (primarily tractors), lamp oil, and kerosene heating oil.

Lease Condensate. A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons. Also called field condensate.

LPG. Liquefied petroleum gas. Consists mainly of propane and butane or a mixture of these and is used as both a fuel and a solvent. Data for LPG from natural gas liquid processing plants are presented under natural gas plant liquids.

Lubricants. All grades of lubricating oils and grease from spindle oil to cylinder oil, including basestocks for making finished lubricating oil and grease. Do not include specialty oils, such as absorption oil, insulating oils, spray oils for pesticides, medicinal oils, etc.

Motor Gasoline. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark ignition engines. Included are leaded and unleaded products and all refinery products listed in ASTM Specification D439.

Naphthas. Refined or partly refined light distillates with an approximate boiling point range of 27° to 221° Centigrade. Blended further or mixed with other materials, they make high-grade motor gasoline or jet fuel. Also used as raw materials for the production of town gas or as feedstocks used to make various types of chemical products; also used as various kinds of solvents.

Natural Asphalt. A native mineral pitch, tar, or bitumen composed principally of hydrocarbons, a natural bituminous rock of dark color comparatively hard and nonvolatile. Does not include asphalt, bitumen, tar, etc., derived from petroleum processing.

Natural Gas Liquids. Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

Natural Gas Plant Liquids. Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators. Products obtained include ethane, liquefied

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petroleum gases (propanes, butane, propane-butane mixtures, and ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and other minor quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Petrochemical Feedstocks. Products from petroleum refineries and natural gas liquids processing plants to be processed further at a petrochemical plant. Include products primarily in the naphtha range, still gas (refinery gas), and liquefied gases for petrochemical use.

Petroleum. A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

Petroleum Coke. A solid residue; the final product of the condensation process in cracking. Includes green or calcined petroleum coke and coke deposited on catalysts.

Petroleum Jelly and Paraffin Wax. Include petrolatum, a semisolid oily product produced from de-waxing lubricating oil basestocks. They consist of microcrystalline wax and oils and paraffin wax removed from distillates, whether crude scale or refined.

Petroleum Products. Products obtained from the processing of crude oil, unfinished oils, natural gas liquids, and other miscellaneous hydrocarbon compounds. Include aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt roal oil, still gas, and other miscellaneous products.

Plant Condensate. Mixtures of hydrocarbons, mostly pentanes and heavier hydrocarbons, recovered at natural gas liquids processing plants. Does not include field or lease condensate.

Refinery Gas. Comprises noncondensable gas collected in petroleum refineries.

Residual Fuel Oil. The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as No. 5 and No. 6 fuel oil that conform to ASTM Specification D396, heavy diesel oil, Navy Special Fuel Oil, Bunker C fuel oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

White Spirit. A highly refined distillate with a boiling point range of about 150° to 200° Centigrade. It is used as a paint solvent and for dry-cleaning purposes.

Natural Gas

Associated Gas. Gas produced in a field containing both oil and gas.

Dry Production. Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas which is flared or vented, gas lost in transmission, and shrinkage. Derived by subtracting shrinkage or extraction loss from marketed production. It represents the amount of natural gas that can be marketed and consumed as a gas.

Gross Production. Gross withdrawals of natural gas from reservoirs.

Liquefied Natural Gas (LNG). Methane (CH_4) and possibly ethane (C_2H_6) which has been cryogenically liquefied.

Marketed Production. Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas which is flared and/or vented, and gas which is lost in transmission before the natural gas liquids have been extracted (shrinkage or extraction loss).

Natural Gas. A mixture of hydrocarbon compounds, primarily methane and small quantities of various nonhydrocarbons existing in gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Reinjected. The forcing of gas under pressure into the oil reservoir in an attempt to increase the recovery of crude oil.

Shrinkage. The volume of natural gas that is transformed into liquid products during processing, primarily at natural gas liquid processing plants, i.e., extraction loss.

Vented/Flared. The release (venting) or burning (flaring) of associated gas as a means of disposal.

Waste. Natural gas lost in transmission.

Coal

Anthracite. A hard, black lustrous coal containing a high percentage of fixed carbon and a low percentage of volatile matter. Often referred to as hard coal. Includes meta-anthracite and semianthracite. Conforms to ASTM Specification D388 for anthracite.

Bituminous Coal. A coal which is high in carbonaceous matter, having a volatility greater than that of anthracite coal and a calorific value greater than that of lignite. Often referred to in the United States as soft coal. Includes subbituminous coal and conforms to ASTM Specification D388 for bituminous and subbituminous coal.

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Coal. Includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.

Coal Briquets. Bituminous coal and lignite briquets comprise the secondary solid fuels manufactured from bituminous coal and lignite by a process in which the coal is partly dried, warmed to expel excess moisture, and then compressed into briquets, usually without the use of a binding substance. In the reduction of briquets to coal equivalent, different conversion factors are applied according to their origin from hard coal, peat, brown coal, or lignite.

Coke (Coal). Bituminous coal from which constituents have been driven off by heat so that the fixed carbon and the ash are fused together. Used primarily in blast furnaces for smelting ores, especially iron ore.

Lignite. A brownish-black coal of low rank with high inherent moisture and volatile matter. Also referred to as brown coal, conforms to ASTM Specification D388 for lignite, and is used almost exclusively for electric power generation.

Production. The sum of sales, mine consumption, issues to miners, and issues to coking, briquetting, and other ancillary plants at mines. Production data include quantities extracted from surface and underground working, and normally exclude wastes removed at mines or associated preparation plants.

Hydroelectric Power

Hydroelectric Power Production. Includes electric utility and industrial production of hydroelectricity, unless otherwise specified. Production is reported on a net basis, i.e., on the amount of electric energy produced after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

Nuclear Electric Power

Nuclear Electric Power Production. Electricity produced by nuclear reactors of various types such as heavy water, light water, and boiling water. Production is reported on a net basis and excludes energy that is generally used by the electric powerplant for its own operating purposes and not for commercial use.

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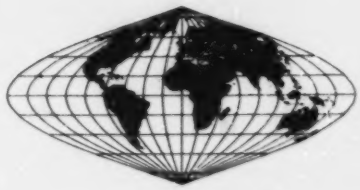

Appendixes

Appendix A
SOURCES

This appendix lists data sources in six sections: coal; crude oil, natural gas liquids, and refined products; hydroelectric power; natural gas; nuclear electric power; and petroleum prices. It is organized alphabetically by title of publication or source. In addition to the titles and sources listed, petroleum-related information from Federal data collection forms was used. Those forms were filled out for 1979 and 1980 by foreign national oil companies, government bureaus, and foreign and domestic corporations. The forms are listed in the petroleum section.

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Appendix B

COUNTRIES, DEPENDENCIES, AND AREAS OF SPECIAL SOVEREIGNTY INCLUDED IN EACH GEOGRAPHIC REGION

North America

Bermuda
Canada
Greenland
Mexico
United States

Central and South America

Argentina
Barbados
Bahama Islands
Belize
Bolivia
Brazil
Chile
Colombia
Costa Rica
Cuba
Dominican Republic
Ecuador
El Salvador
Guatemala
Guyana
Haiti
Honduras
Jamaica
Netherlands Antilles
Nicaragua
Panama Republic
Paraguay
Peru
Puerto Rico
Surinam
Trinidad and Tobago
Uruguay
Venezuela
Virgin Islands

Middle East

Bahrain
Cyprus
Iran
Iraq
Israel
Jordan
Kuwait
Lebanon
Oman
Qatar
Saudi Arabia
Syria
United Arab Emirates
(Incl. Abu Dhabi, Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah, and Umm al-Qaiwain)
Yemen (Sana)
Yemen (Aden)

Western Europe

Austria
Belgium
Denmark
Finland
France
Germany, West
Greece
Iceland
Ireland
Italy
Luxembourg
Malta
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom
Yugoslavia

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Eastern Europe and U.S.S.R.

Albania
Bulgaria
Czechoslovakia
Germany, East
Hungary
Poland
Romania
U.S.S.R.

Far East and Oceania

Afghanistan
Australia
Bangladesh
Bhutan
Brunei
Burma
China
Fiji
Guam
Hong Kong
India
Indonesia
Japan
Kampuchea
Kiribatia
Korea, North
Korea, South
Laos
Malaysia
Mongolia
Nepal
New Caledonia
New Zealand
Pakistan
Papua New Guinea
Philippines
Singapore
Solomon Islands
Sri Lanka
Taiwan
Thailand
Tuvalu
Vanuatu
Vietnam

Africa

Algeria
Angola
Benin
Botswana
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Congo
Dahomey
Djibouti
Egypt
Equatorial Guinea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Ivory Coast
Kenya
Lesotho
Liberia
Libya
Madagascar
Malawi
Mali
Mauritania
Mauritius
Morocco
Mozambique
Namibia
Niger
Nigeria
Rwanda
Senegal
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Tunisia
Uganda
Upper Volta
Zaire
Zambia
Zimbabwe

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Appendix C

VOLUME AND WEIGHT CONVERSIONS

Conversion Factors for Refined Products

Refined Product	Barrels per Metric Ton	Refined Product	Barrels per Metric Ton
Asphalt	6.06	Natural Gasoline	10.00
Aviation Gasoline	8.90	Natural Gas Liquids (NGL)	10.40
Distillate Fuel Oil	7.46	Naphthas	8.50
Greases	6.30	Paraffin Oil	7.14
Jet Fuel	8.00	Paraffin Wax	7.87
Kerosene	7.75	Petrolatum	7.87
Liquefied Petroleum Gas (LPG)	11.60	Petroleum Coke	5.50
Lubricants	7.00	Residual Fuel Oil	6.66
Motor Gasoline	8.50	White Spirits	8.50
		Miscellaneous Products	8.04

Liquid Fuels

42 U.S. gallons = 1 barrel
1 cubic meter = 6.289 barrels
159 liters = 1 barrel

Gaseous Fuels

35.31467 cubic feet = 1 cubic meter

Solid Fuels

1 long ton = 1.12 short tons
1 metric ton = 1.10 short tons

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Barrels of Crude Oil per Metric Ton

	1973	1974	1975	1976	1977	1978	1979	1980
North America								
Canada	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Mexico	7.108	7.108	7.108	7.108	7.108	7.108	7.108	7.108
United States	7.330	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Central and South America								
Argentina	7.124	7.124	7.124	7.124	7.124	7.124	7.124	7.124
Barbados	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Bolivia	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881
Brazil	7.533	7.533	7.533	7.533	7.533	7.533	7.533	7.533
Chile	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Colombia	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Cuba	7.152	7.152	7.152	7.152	7.152	7.152	7.152	7.152
Ecuador	7.162	7.211	7.208	7.208	7.212	7.327	7.327	7.327
Guatemala	7.210	7.210	7.210	7.210	7.210	7.210	7.210	7.210
Peru	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Trinidad and Tobago	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Venezuela	6.990	6.972	7.011	7.003	6.966	6.972	6.972	6.972
Western Europe								
Austria	7.006	7.006	7.006	7.006	7.006	7.006	7.006	7.006
Denmark	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
France	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Germany, West	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Italy	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853
Netherlands	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853
Norway	7.462	7.462	7.462	7.462	7.462	7.462	7.462	7.462
Spain	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Turkey	7.165	7.165	7.165	7.165	7.165	7.165	7.165	7.165
United Kingdom	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Yugoslavia	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Eastern Europe and U.S.S.R.								
Albania	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672
Bulgaria	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Czechoslovakia	6.780	6.780	6.780	6.780	6.780	6.780	6.780	6.780
Germany, East	7.223	7.223	7.223	7.223	7.223	7.223	7.223	7.223
Hungary	6.780	6.780	6.780	6.780	6.780	6.780	6.780	6.780
Poland	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Romania	7.560	7.560	7.560	7.560	7.560	7.560	7.560	7.560
U.S.S.R.	7.289	7.289	7.289	7.289	7.289	7.289	7.289	7.289

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Barrels of Crude Oil per Metric Ton (Continued)

	1973	1974	1975	1976	1977	1978	1979	1980
Middle East								
Bahrain	7.349	7.349	7.349	7.349	7.349	7.349	7.349	7.349
Iran	7.311	7.307	7.305	7.300	7.314	7.407	7.407	7.407
Iraq	7.409	7.436	7.436	7.400	7.440	7.573	7.573	7.573
Israel	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Kuwait	7.237	7.236	7.258	6.269	7.277	7.369	7.266	7.266
Oman	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Qatar	7.572	7.573	7.543	7.581	7.579	7.668	7.668	7.668
Saudi Arabia	7.363	7.350	7.325	7.381	7.266	7.428	7.428	7.428
Syria	6.959	6.959	6.959	6.959	6.959	6.959	6.959	6.959
United Arab Emirates	7.550	7.559	7.556	7.444	7.523	7.534	7.534	7.534
Africa								
Algeria	7.891	7.846	7.817	7.814	7.864	7.853	7.853	7.853
Angola	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409
Cameroon	7.289	7.289	7.289	7.289	7.289	7.289	7.289	7.289
Congo	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Egypt	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256
Gabon	7.275	7.227	7.159	7.222	7.218	7.328	7.328	7.328
Libya	7.575	7.566	7.561	7.575	7.516	7.718	7.718	7.718
Morocco	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Nigeria	7.317	7.374	7.372	7.350	7.397	7.515	7.515	7.515
Tunisia	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
Zaire	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Far East and Oceania								
Australia	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Burma	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
China	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
India	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Indonesia	7.392	7.432	7.437	7.423	7.423	7.559	7.559	7.568
Japan	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Mongolia	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Malaysia and Brunei	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
New Zealand	7.563	7.563	7.563	7.563	7.563	7.563	7.563	7.563
Pakistan	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Taiwan	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568
Other	7.300	7.300	7.300	7.300	7.300	7.300	7.300	7.300

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Appendix D

GROSS THERMAL CONVERSIONS BY ENERGY SOURCE

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour) Hydro	Electric Power (Btu per kilowatt-hour) Nuclear
North America						
Canada						
1973	5,810	4,348	999	23,042	10,400	11,686
1974	5,810	4,348	999	23,260	10,400	11,686
1975	5,810	4,348	999	23,313	10,400	11,686
1976	5,810	4,348	999	23,146	10,400	11,686
1977	5,810	4,348	999	22,858	10,400	11,701
1978	5,810	4,348	999	23,218	10,400	11,705
1979	5,810	4,348	999	21,232	10,400	11,708
1980	5,810	4,348	999	21,128	10,400	11,708
Mexico						
1973-1980	6,010	4,348	963	17,985	10,400	[a]
United States						
1973	5,800	4,049	1,021	24,001	10,389	10,903
1974	5,800	4,011	1,024	23,717	10,442	11,161
1975	5,800	3,984	1,021	23,202	10,406	11,013
1976	5,800	3,964	1,020	23,146	10,373	11,047
1977	5,800	3,941	1,021	22,704	10,435	10,769
1978	5,800	3,925	1,019	22,438	10,435	10,769
1979	5,800	3,925	1,019	22,597	10,435	10,769
1980	5,800	3,925	1,019	22,596	10,435	10,769
Central and South America						
Argentina						
1973-1980	6,001	4,348	932	21,235	10,400	11,645
Barbados						
1973-1980	5,879	[a]	1,047	[a]	[a]	[a]
Bolivia						
1973-1980	5,574	4,348	932	[a]	10,400	[a]
Brazil						
1973-1980	5,765	4,348	1,033	20,650	10,400	[a]
Chile						
1973-1978	5,780	4,348	999	25,200	10,400	[a]
1979	5,780	4,348	999	24,508	10,400	[a]
1980	5,780	4,348	999	24,612	10,400	[a]
Colombia						
1973-1980	6,023	4,348	1,145	25,190	10,400	[a]
Costa Rica						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Cuba						
1973-1980	5,985	4,348	1,047	[a]	10,400	[a]
Dominican Republic						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Ecuador						
1973	5,985	4,348	1,299	[a]	10,400	[a]
1974-1977	5,937	4,348	1,299	[a]	10,400	[a]
1978-1979	5,888	4,348	1,299	[a]	10,400	[a]
1979-1980	5,888	4,348	1,299	[a]	10,400	[a]
El Salvador						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Guatemala						
1973-1980	5,948	[a]	[a]	[a]	10,400	[a]
Haiti						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour) Hydro	Electric Power (Btu per kilowatt-hour) Nuclear
Central and South America (continued)						
Honduras						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Jamaica						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Nicaragua						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Panama Republic						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Paraguay						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Peru						
1973-1980	5,831	4,348	999	25,190	10,400	(a)
Puerto Rico						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Surinam						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Trinidad and Tobago						
1973-1980	6,023	4,348	1,047	(a)	(a)	(a)
Uruguay						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Venezuela						
1973-1976	6,079	4,348	1,139	25,190	10,400	(a)
1977	6,125	4,348	1,139	25,190	10,400	(a)
1978-1980	6,079	4,348	1,139	25,190	10,400	(a)
Western Europe						
Austria						
1973-1980	6,069	4,348	1,097	12,600	10,400	(a)
Belgium and Luxembourg						
1973-1980	(a)	(a)	943	23,023	10,400	10,392
Denmark						
1973-1980	5,677	(a)	(a)	(a)	10,400	(a)
Finland						
1973-1976	(a)	(a)	(a)	(a)	10,400	(a)
1977-1978	(a)	(a)	(a)	(a)	10,400	10,596
1979	(a)	(a)	(a)	(a)	10,400	10,468
1980	(a)	(a)	(a)	(a)	10,400	10,695
France						
1973	5,879	4,348	1,022	24,220	10,400	12,607
1974	5,879	4,348	1,022	24,116	10,400	12,607
1975	5,879	4,348	1,022	23,945	10,400	12,607
1976	5,879	4,348	1,022	23,940	10,400	12,607
1977	5,879	4,348	1,022	23,983	10,400	12,360
1978	5,879	4,348	1,022	24,042	10,400	12,156
1979	5,879	4,348	1,022	24,017	10,400	11,885
1980	5,879	4,348	899	23,932	10,400	11,344
Germany, West						
1973	5,927	(a)	943	15,509	10,400	10,840
1974	5,927	(a)	943	15,136	10,400	10,703
1975	5,927	(a)	943	15,113	10,400	10,658
1976	5,927	(a)	943	14,597	10,400	10,598
1977	5,927	(a)	943	14,752	10,400	10,598
1978	5,927	(a)	943	14,674	10,400	10,528
1979	5,927	(a)	943	14,570	10,400	10,528
1980	5,927	(a)	943	14,780	10,400	10,657
Greece						
1973-1980	(a)	(a)	(a)	4,788	10,400	(a)
Iceland						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Ireland						
1973-1980	(a)	(a)	(a)	25,190	10,400	(a)
Italy						
1973	6,158	4,348	1,028	9,133	10,400	12,587
1974-1976	6,158	4,348	1,028	9,100	10,400	12,587
1977	6,158	4,348	1,028	9,072	10,400	12,587
1978-1980	6,158	4,348	1,028	9,068	9,068	12,131

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil	Natural Gas Liquids	Natural Gas (Dry)	Coal	Electric Power (Btu per kilowatt-hour)	
	(thousand Btu per barrel)		(Btu per cubic foot)	(thousand Btu per short ton)	Hydro	Nuclear
Western Europe (continued)						
Netherlands						
1973-1974	6,158	4,348	951	25,200	[a]	10,548
1975-1980	6,158	4,348	951	[a]	[a]	10,548
Norway						
1973-1980	5,805	4,348	1,139	24,106	10,400	[a]
Portugal						
1973-1980	[a]	[a]	[a]	25,190	10,400	[a]
Spain						
1973	5,780	4,348	1,047	19,564	10,400	11,307
1974	5,780	4,348	1,047	19,685	10,400	11,307
1975	5,780	4,348	1,047	19,473	10,400	11,307
1976	5,780	4,348	1,047	19,096	10,400	11,307
1977	5,780	4,348	1,047	18,654	10,400	11,307
1978	5,780	4,348	1,047	17,895	10,400	11,307
1979	5,780	4,348	1,047	17,324	10,400	11,307
1980	5,780	4,348	1,047	17,448	10,400	11,307
Sweden						
1973	[a]	[a]	[a]	[a]	10,400	10,035
1974	[a]	[a]	[a]	[a]	10,400	10,349
1975-1976	[a]	[a]	[a]	[a]	10,400	10,287
1977-1980	[a]	[a]	[a]	[a]	10,400	10,270
Switzerland						
1973-1978	[a]	[a]	[a]	[a]	10,400	10,608
1979	[a]	[a]	[a]	[a]	10,400	10,556
1980	[a]	[a]	[a]	[a]	10,400	10,556
Turkey						
1973	5,976	[a]	1,047	15,340	10,400	[a]
1974	5,976	[a]	1,047	16,190	10,400	[a]
1975	5,976	[a]	1,047	15,537	10,400	[a]
1976	5,976	[a]	1,047	15,089	10,400	[a]
1977	5,976	[a]	1,047	15,192	10,400	[a]
1978	5,976	[a]	1,047	13,934	10,400	[a]
1979	5,976	[a]	1,047	14,338	10,400	[a]
1980	5,976	[a]	1,047	13,376	10,400	[a]
United Kingdom						
1973-1975	5,879	4,348	1,065	22,200	10,400	13,076
1976-1980	5,879	4,348	1,065	22,200	10,400	12,925
Yugoslavia						
1973	5,831	4,348	1,112	10,761	10,400	[a]
1974	5,831	4,348	1,112	10,763	10,400	[a]
1975	5,831	4,348	1,112	10,747	10,400	[a]
1976	5,831	4,348	1,112	10,734	10,400	[a]
1977	5,831	4,348	1,112	10,692	10,400	[a]
1978	5,831	4,348	1,112	10,674	10,400	[a]
1979	5,831	4,348	1,112	10,647	10,400	[a]
1980	5,831	4,348	1,112	10,614	10,400	[a]
Eastern Europe and U.S.S.R.						
Albania						
1973-1980	6,180	[a]	1,047	12,600	10,400	[a]
Bulgaria						
1973	5,879	[a]	1,038	12,765	10,400	11,006
1974	5,879	[a]	1,038	12,759	10,400	11,006
1975	5,879	[a]	1,038	12,749	10,400	11,006
1976	5,879	[a]	1,038	12,740	10,400	11,006
1977	5,879	[a]	1,038	12,727	10,400	11,006
1978	5,879	[a]	1,038	12,736	10,400	11,006
1979	5,879	[a]	1,038	12,723	10,400	11,006
1980	5,879	[a]	1,038	12,705	10,400	11,006
Czechoslovakia						
1973	6,204	4,620	1,047	13,870	10,400	13,648
1974	6,204	4,620	1,047	13,841	10,400	13,648
1975	6,204	4,620	1,047	13,750	10,400	13,648
1976	6,204	4,620	1,047	13,716	10,400	13,648
1977	6,204	4,620	1,047	13,617	10,400	13,648

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour): Hydro	Electric Power (Btu per kilowatt-hour): Nuclear
Eastern Europe and U.S.S.R.—Czechoslovakia (continued)						
1978	6,204	4,620	1,047	13,597	10,400	12,761
1979	6,204	4,620	1,047	13,593	10,400	12,650
1980	6,204	4,620	1,047	13,430	10,400	12,650
Germany, East						
1973	5,900	(a)	385	7,814	10,400	11,006
1974	5,900	(a)	385	7,802	10,400	11,006
1975	5,900	(a)	385	7,549	10,400	11,006
1976	5,900	(a)	385	7,592	10,400	11,006
1977	5,900	(a)	385	7,550	10,400	11,006
1978	5,900	(a)	385	7,579	10,400	11,006
1979	5,900	(a)	385	7,642	10,400	11,006
1980	5,900	(a)	385	7,642	10,400	11,006
Hungary						
1973	6,249	4,183	1,114	11,754	10,400	(a)
1974	6,249	4,251	1,114	11,974	10,400	(a)
1975	6,249	4,243	1,114	11,665	10,400	(a)
1976	6,249	4,402	1,114	11,853	10,400	(a)
1977	6,249	4,263	1,114	11,761	10,400	(a)
1978	6,249	4,356	1,114	11,662	10,400	(a)
1979	6,249	4,378	1,114	10,460	10,400	(a)
1980	6,249	4,387	1,114	10,467	10,400	(a)
Poland						
1973	5,831	4,173	1,023	21,678	10,400	(a)
1974	5,831	4,564	1,023	21,710	10,400	(a)
1975	5,831	4,508	1,023	21,876	10,400	(a)
1976	5,831	4,482	1,023	22,035	10,400	(a)
1977	5,831	4,371	1,023	22,031	10,400	(a)
1978	5,831	4,447	1,023	22,095	10,400	(a)
1979	5,831	4,447	1,023	22,381	10,400	(a)
1980	5,831	4,447	1,023	22,364	10,400	(a)
Romania						
1973	5,780	4,620	1,123	13,872	10,400	(a)
1974	5,780	4,620	1,123	12,817	10,400	(a)
1975	5,780	4,620	1,123	12,725	10,400	(a)
1976	5,780	4,620	1,123	12,989	10,400	(a)
1977	5,780	4,620	1,123	12,875	10,400	(a)
1978	5,760	4,620	1,123	12,712	10,400	(a)
1979	5,780	4,620	1,123	12,554	10,400	(a)
1980	5,780	4,620	1,123	12,554	10,400	(a)
U.S.S.R.						
1973	5,438	4,348	940	17,689	10,400	11,078
1974	5,434	4,348	940	17,671	10,400	11,078
1975	5,434	4,348	932	16,946	10,400	11,078
1976	5,432	4,348	932	16,958	10,400	11,078
1977	5,432	4,348	932	16,953	10,400	11,078
1978	5,432	4,348	932	16,953	10,400	11,078
1979	5,432	4,348	932	16,961	10,400	11,078
1980	5,432	4,348	932	16,961	10,400	11,373
Middle East						
Bahrain						
1973-1980	5,869	4,348	1,047	(a)	(a)	(a)
Iran						
1973-1980	5,888	4,348	1,056	25,190	10,400	(a)
Iraq						
1973-1977	5,838	4,348	1,047	(a)	(a)	(a)
1978-1980	5,737	4,348	1,047	(a)	(a)	(a)
Israel						
1973-1980	5,927	4,348	1,039	(a)	(a)	(a)
Kuwait						
1973	5,945	4,348	1,047	(a)	(a)	(a)
1974	5,903	4,348	1,047	(a)	(a)	(a)
1975	5,909	4,348	1,047	(a)	(a)	(a)
1976	5,911	4,348	1,047	(a)	(a)	(a)
1977-1978	5,907	4,348	1,047	(a)	(a)	(a)
1979	5,921	4,348	1,047	(a)	(a)	(a)
1980	5,921	4,348	1,047	(a)	(a)	(a)

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour) Hydro	Electric Power (Btu per kilowatt-hour) Nuclear
Middle East (continued)						
Lebanon						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Oman						
1973-1980	5,879	[a]	[a]	[a]	[a]	[a]
Qatar						
1973-1974	5,737	4,348	1,047	[a]	[a]	[a]
1975	5,788	4,348	1,047	[a]	[a]	[a]
1976	5,737	4,348	1,047	[a]	[a]	[a]
1977	5,739	4,348	1,047	[a]	[a]	[a]
1978-1980	5,690	4,348	1,047	[a]	[a]	[a]
Saudi Arabia						
1973	5,887	4,348	1,047	[a]	[a]	[a]
1974	5,893	4,348	1,047	[a]	[a]	[a]
1975	5,894	4,348	1,047	[a]	[a]	[a]
1976	5,844	4,348	1,047	[a]	[a]	[a]
1977	5,892	4,348	1,047	[a]	[a]	[a]
1978	5,845	4,348	1,047	[a]	[a]	[a]
1979	5,844	4,348	1,047	[a]	[a]	[a]
1980	5,844	4,348	1,047	[a]	[a]	[a]
Syria						
1973-1980	6,098	[a]	1,047	[a]	10,400	[a]
United Arab Emirates						
1973	5,788	4,348	1,047	[a]	[a]	[a]
1974-1975	5,737	4,348	1,047	[a]	[a]	[a]
1976	5,838	4,348	1,047	[a]	[a]	[a]
1977-1980	5,788	4,348	1,047	[a]	[a]	[a]
Africa						
Algeria						
1973-1974	5,585	4,348	1,061	25,200	10,400	[a]
1975-1976	5,638	4,348	1,061	25,200	10,400	[a]
1977-1980	5,585	4,348	1,061	[a]	10,400	[a]
Angola						
1973-1980	5,835	[a]	[a]	[a]	10,400	[a]
Botswana						
1973	[a]	[a]	[a]	[a]	[a]	[a]
1974-1980	[a]	[a]	[a]	25,190	[a]	[a]
Cameroon						
1973-1980	5,948	[a]	[a]	[a]	10,400	[a]
Congo						
1973-1980	5,780	[a]	1,047	[a]	10,400	[a]
Egypt						
1973-1980	5,922	4,348	1,047	[a]	10,400	[a]
Ethiopia						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Gabon						
1973-1974	5,937	[a]	1,047	[a]	10,400	[a]
1975	5,965	[a]	1,047	[a]	10,400	[a]
1976-1977	5,937	[a]	1,047	[a]	10,400	[a]
1978-1979	5,888	[a]	1,047	[a]	10,400	[a]
1980	5,888	[a]	1,022	[a]	10,400	[a]
Ghana						
1973-1980	5,900	[a]	[a]	[a]	[a]	[a]
Guinea						
1973-1980	[a]	[a]	[a]	[a]	[a]	[a]
Ivory Coast						
1973-1980	5,900	[a]	[a]	[a]	10,400	[a]
Kenya						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Liberia						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Libya						
1973-1977	5,737	4,348	1,047	[a]	[a]	[a]
1978-1980	5,690	4,348	1,047	[a]	[a]	[a]
Madagascar						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour) Hydro	Electric Power (Btu per kilowatt-hour) Nuclear
Africa (continued)						
Malawi						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Mali						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Mauritius						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Morocco						
1973-1980	5,729	(a)	1,047	25,190	10,400	(a)
Mozambique						
1973-1980	(a)	(a)	(a)	25,190	10,400	(a)
Nigeria						
1973-1976	5,888	(a)	1,047	25,190	10,400	(a)
1977	5,838	(a)	1,047	25,190	10,400	(a)
1978	5,788	(a)	1,047	25,190	10,400	(a)
1979-1980	5,768	(a)	1,047	25,190	10,400	(a)
South Africa						
1973-1980	(a)	(a)	(a)	21,400	(a)	(a)
Sudan						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Swaziland						
1973-1980	(a)	(a)	(a)	25,190	(a)	(a)
Tanzania						
1973-1976	(a)	(a)	(a)	25,190	10,400	(a)
1977-1980	(a)	(a)	(a)	(a)	10,400	(a)
Tunisia						
1973-1980	5,677	(a)	1,235	(a)	10,400	(a)
Uganda						
1973-1980	(a)	(a)	(a)	(a)	10,400	(a)
Zaire						
1973-1980	5,879	(a)	(a)	25,190	10,400	(a)
Zambia						
1973-1980	(a)	(a)	(a)	21,235	10,400	(a)
Zimbabwe						
1973-1980	(a)	(a)	(a)	25,190	10,400	(a)
Far East and Oceania						
Afghanistan						
1973-1980	(a)	(a)	1,047	25,190	10,400	(a)
Australia						
1973	5,810	4,348	1,040	19,289	10,400	(a)
1974	5,810	4,348	1,041	19,088	10,400	(a)
1975	5,810	4,348	1,041	19,184	10,400	(a)
1976	5,810	4,348	1,041	19,243	10,400	(a)
1977	5,810	4,348	1,042	19,550	10,400	(a)
1978	5,810	4,348	1,042	19,254	10,400	(a)
1979	5,810	4,348	1,042	19,750	10,400	(a)
1980	5,810	4,348	1,042	19,764	10,400	(a)
Bangladesh						
1973-1980	(a)	(a)	974	(a)	10,400	(a)
Brunei						
1973-1980	5,900	4,348	1,114	(a)	(a)	(a)
Burma						
1973-1980	6,023	(a)	1,047	25,190	10,400	(a)
China						
1973-1980	5,879	(a)	1,047	21,587	10,400	(a)
India						
1973	5,729	(a)	1,034	17,591	10,400	11,386
1974	5,729	(a)	1,034	17,648	10,400	11,386
1975	5,729	(a)	1,034	17,710	10,400	11,386
1976	5,729	(a)	1,034	17,627	10,400	11,386
1977	5,729	(a)	1,034	17,649	10,400	11,386
1978	5,729	(a)	1,034	17,654	10,400	11,386
1979	5,729	(a)	1,034	17,691	10,400	11,386
1980	5,729	(a)	1,034	17,554	10,400	11,386

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GROSS THERMAL CONVERSIONS BY ENERGY SOURCE (Continued)

Region Country Year	Crude Oil (thousand Btu per barrel)	Natural Gas Liquids (thousand Btu per barrel)	Natural Gas (Dry) (Btu per cubic foot)	Coal (thousand Btu per short ton)	Electric Power (Btu per kilowatt-hour) Hydro	Electric Power (Btu per kilowatt-hour) Nuclear
Far East and Oceania (continued)						
Indonesia						
1973-1977	5,838	4,348	1,047	25,190	10,400	[a]
1978-1980	5,737	4,348	1,047	25,190	10,400	[a]
Japan						
1973	5,900	4,348	1,078	22,642	10,400	11,106
1974	5,900	4,348	1,078	22,643	10,400	10,892
1975	5,900	4,348	1,078	22,650	10,400	10,801
1976	5,900	4,348	1,078	22,655	10,400	10,774
1977	5,900	4,348	1,078	22,667	10,400	10,722
1978	5,900	4,348	1,078	22,667	10,400	10,812
1979	5,900	4,348	1,078	22,663	10,400	10,767
1980	5,900	4,348	1,078	22,554	10,400	10,767
Korea, North						
1973-1979	[a]	[a]	[a]	25,190	10,400	[a]
1980	[a]	[a]	1,078	25,160	10,400	10,767
Korea, South						
1973-1976	[a]	[a]	[a]	19,065	10,400	[a]
1977-1980	[a]	[a]	[a]	19,065	10,400	9,919
Laos						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Malaysia						
1973-1980	5,877	4,348	1,034	[a]	10,400	[a]
Mongolia						
1973	[a]	[a]	[a]	9,156	10,400	[a]
1974	[a]	[a]	[a]	9,250	10,400	[a]
1975	[a]	[a]	[a]	9,374	10,400	[a]
1976	[a]	[a]	[a]	9,500	10,400	[a]
1977	[a]	[a]	[a]	9,538	10,400	[a]
1978	[a]	[a]	[a]	9,558	10,400	[a]
1979	[a]	[a]	[a]	9,773	10,400	[a]
1980	[a]	[a]	[a]	9,773	10,400	[a]
New Caledonia						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
New Zealand						
1973	5,748	4,348	1,141	20,490	10,400	[a]
1974	5,748	4,348	1,141	20,551	10,400	[a]
1975	5,748	4,348	1,141	20,510	10,400	[a]
1976	5,748	4,348	1,141	20,411	10,400	[a]
1977	5,748	4,348	1,141	20,408	10,400	[a]
1978	5,748	4,348	1,141	20,341	10,400	[a]
1979	5,748	4,348	1,141	20,067	10,400	[a]
1980	5,748	4,348	1,141	20,208	10,400	[a]
Pakistan						
1973-1980	5,879	4,348	974	17,640	10,400	11,806
Papua New Guinea						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Philippines						
1973-1980	5,900	[a]	[a]	17,003	10,400	[a]
Sri Lanka						
1973-1980	[a]	[a]	[a]	[a]	10,400	[a]
Taiwan						
1973-1977	6,317	4,348	1,047	25,190	[a]	[a]
1978-1980	6,317	4,348	1,047	25,190	[a]	10,035
Thailand						
1973-1980	[a]	[a]	[a]	8,315	10,400	[a]
Vietnam						
1973-1980	[a]	[a]	[a]	25,190	10,400	[a]

[a]This energy component not produced.

Note: The hydropower conversion factors are the prevailing heat rate factors at fossil fuel steam electric powerplants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydropower production during periods of drought. The factor of 10,400, used for all producing countries except the United States, is an average based on the U.S. factors.

Note: The nuclear electric power conversion factor is the thermal equivalent of fossil fuels adjusted for average efficiency factors for individual nuclear electric power plants.

Sources: Refer to Appendix A.

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